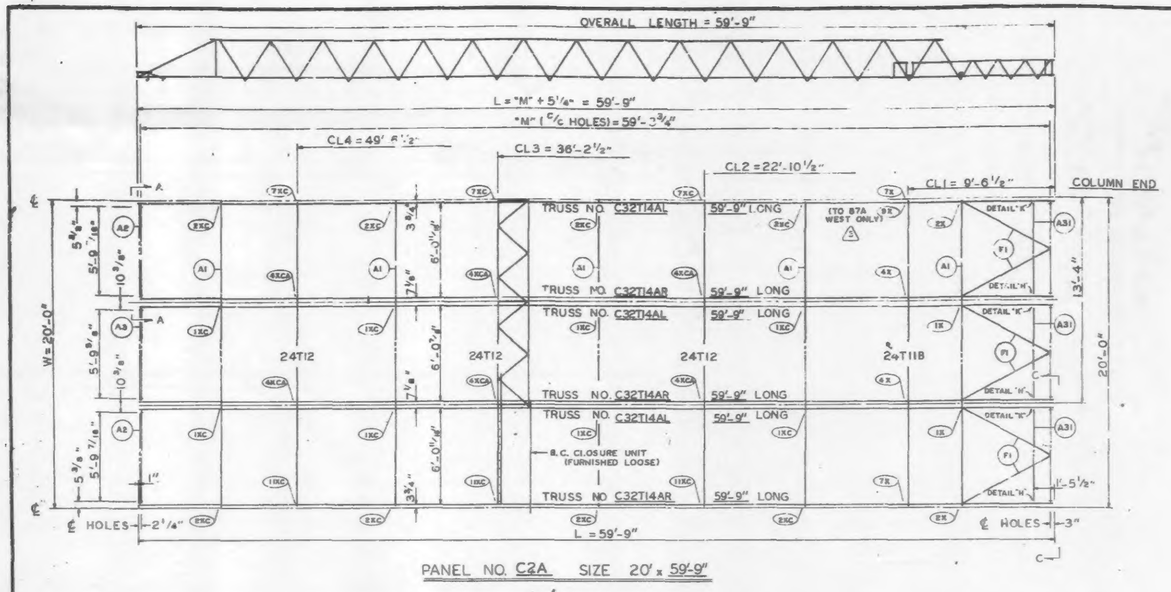
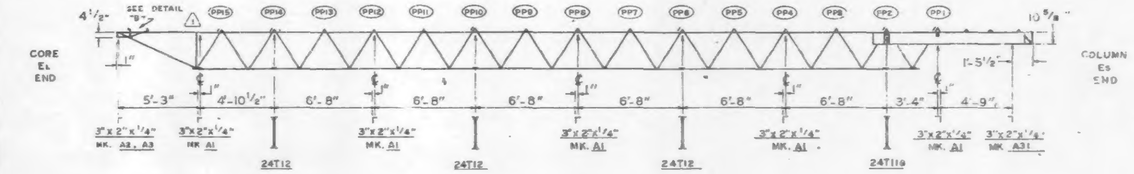
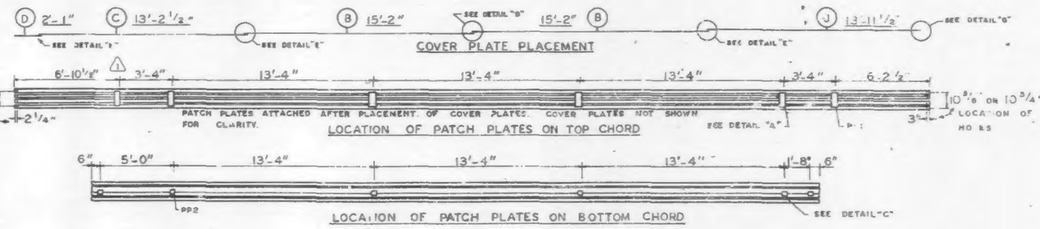
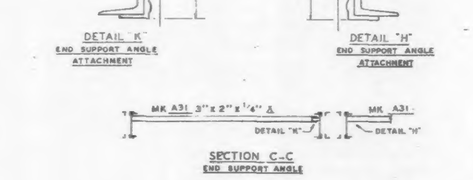
200-299
WTC1-131-LECA



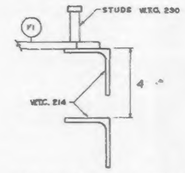
PANEL NO. C2A SIZE 20' x 59'-9"







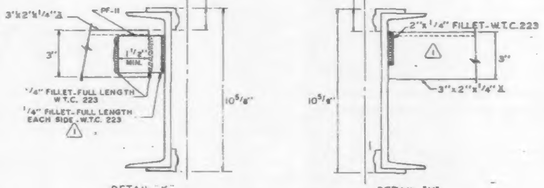
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T14AL	3	C32T14AL x 59'-9"	ST 214AL
	T14AR	3	C32T14AR x 59'-9"	ST 214AL
BRIDGING TRUSSES	T11B	1	24T11B x 19'-11"	ST 211B
	T12	3	24T12 x 19'-11"	ST 212
CLOSURE UNIT	BC	3	1 1/4" D 6'-8 1/2" TUBE	ST 212
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	11/4" x 8 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/4" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	21	2"x1 1/2"x .25"x0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" B x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P6	6	3"x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (15)
ALL CONNECTION DETAILS FOR FLOORS 25,59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.

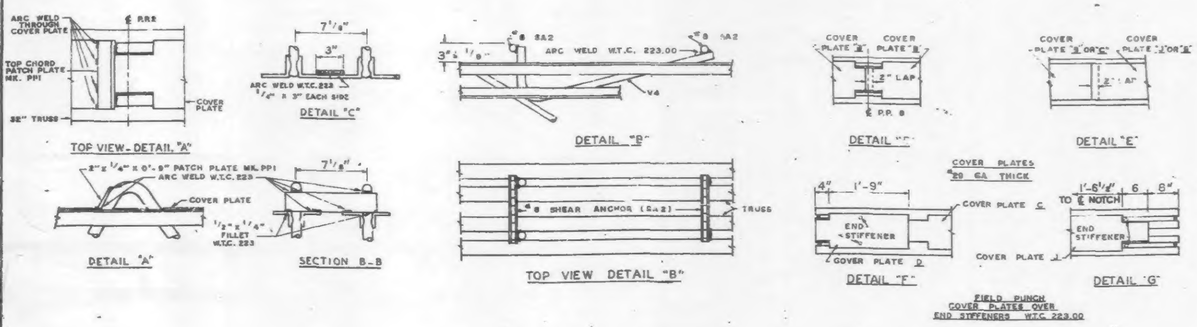


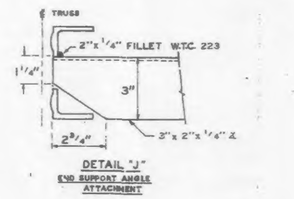
SECTION C-C
END SUPPORT ANGLE

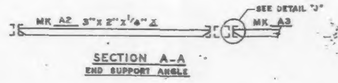
NO.	DATE	REVISION	BY
3	6-16-69	AS NOTED	G.D.C.
2	5-12-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

REF. DRWG.

7-A83-28	10-4-68
7-A84-28	7-22-68
7-A81-13	10-4-68
7-A82-7	7-22-68
7-A82-15	10-4-68







SECTION A-A
END SUPPORT ANGLE

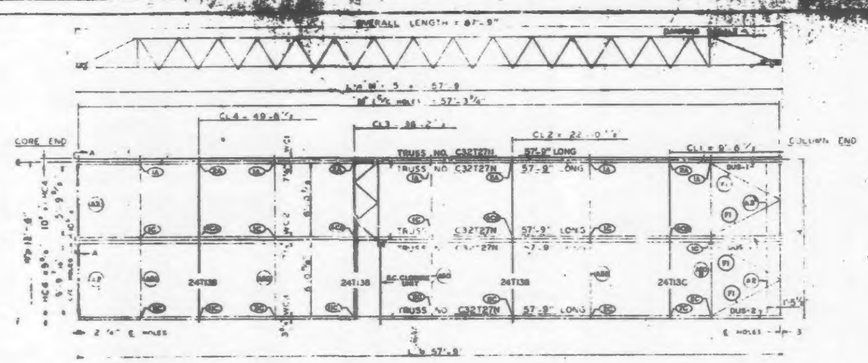
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH) (1)

PANEL C2A - 20' x 59'-9"

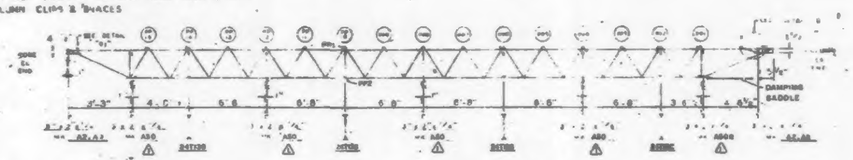
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST) (2)

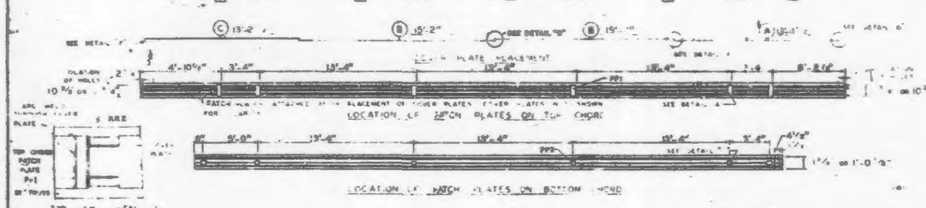
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-28	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 6/20/69	DRAWN BY TwR DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE DEC. 5, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WHITE		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP C2A

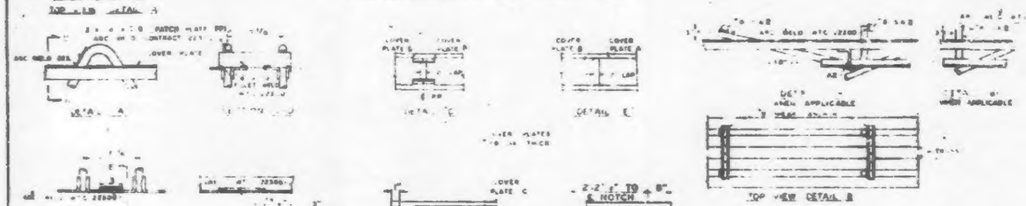


PANEL NO. C6N SIZE 13'-4" x 57'-9"

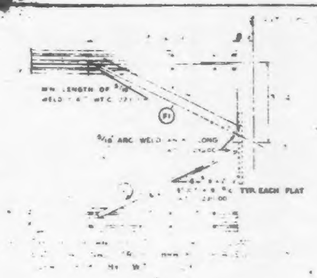
℄ & DIMENSION -C4 ARE RELATED TO HOLES NOT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ IN THE COLUMN CLIPS & BRACES







NOTE ALL ARC WELDS TO BE MADE WITH 70 KSI ELECTRODES IN THE E 70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE CONTINUOUS FULL THROAT FILLET



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

NUMBERS AND LETTERS IN ELLIPSES ie. (C1), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 OR CD 228.

REQUIRED MATERIALS

MATERIAL	SECT.	NO.	MARK	WT.
FLOOR TRUSSES	T27N	4	C32T27N = 57'-9"	727
				727
BRIDGING TRUSSES	T13B	3	24T13B = 16'-10 1/2"	ST 200
	T13C	1	24T13C = 16'-10 1/2"	ST 200
3"x2"x1/4" ANGLE	A2	2	3"x2"x1/4" x 3'-11"	ST 403
	A3	2	3"x2"x1/4" x 3'-11"	ST 403
	A4	4	3"x2"x1/4" x 14'-1 1/2"	ST 403
DIAGONAL FLATS	F1	4	1" x 8" x 8'-8"	ST 402
	PP1	18	2" x 1'-4" x 0'-9"	ST 400
		10	1" x 8" x 0'-9"	ST 830
				ST 303
				.03
	C	3	9" x .045" x 10'-2"	ST 103
		13	8" x 6" x 6" x 1/4" x 0'-8"	ST 400
	SAB	8	5/8" ø REBAR x 0'-8"	ST 400
	RVD-1	2	3" x 2" x 2" x 5/16" x 2'-1"	ST 200
	DUS-2	1	3"x2"x2"x5/16"x2'-5"	ST 200
CONNECTION BAR	CB1	4	1" x 3" x 1'-3"	ST 400
CONNECTION PLATES	P1	8	3/16" x 2'-9 1/2" x 0'-8"	ST 400
	P2	4	3/16" x .188" x 0'-8"	ST 400
	P3		3/16" x .188" x 1'-4"	ST 400
	P4	4	3/16" x 1" x 0'-10"	ST 410
CLOSURE UNIT	BC	3	1/16" D @ 0'-2" THICK	ST 2100

NO.	DATE	REVISION	BY
1	4-24-69	AS NOTED	DSC

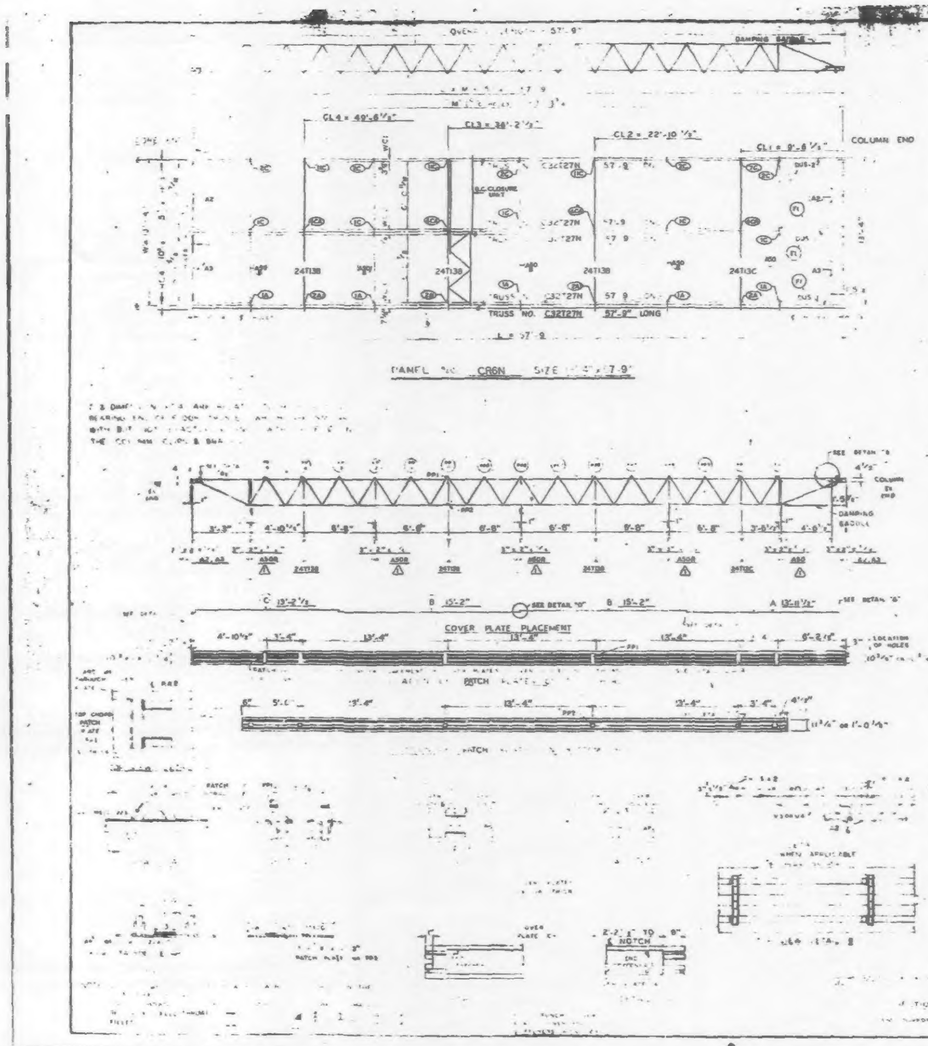
REF DRWG

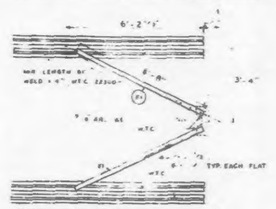
	ABS 1&2	10-4-68
	S 824-15 & 16	7-22-68
	S 824-69	10-24-68
	SA-24	1-8-68
	S 824-77	2-5-68
	ABS-20	11-8-68
	ABS-8	12-20-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (NORTH SHAFT)
PANEL C6N 13'-4" x 57'-9"
BLDG. B FLOORS 44 (WEST SHAFT)

FABRICATION BY [illegible] STEEL CORP.
[illegible], ILLINOIS
APPROVED FOR FABRICATION [illegible] DATE 3/4/69
FOR FABRICATION [illegible]
DRAWN BY [illegible] DATE MARCH 20, 1969
CHECKED BY A.A. Assoc. DATE MARCH 24, 1969
FABRICATION CODE NO. 220
NO CHANGES OF THIS SHT.
SHEET NO. FP-[illegible]





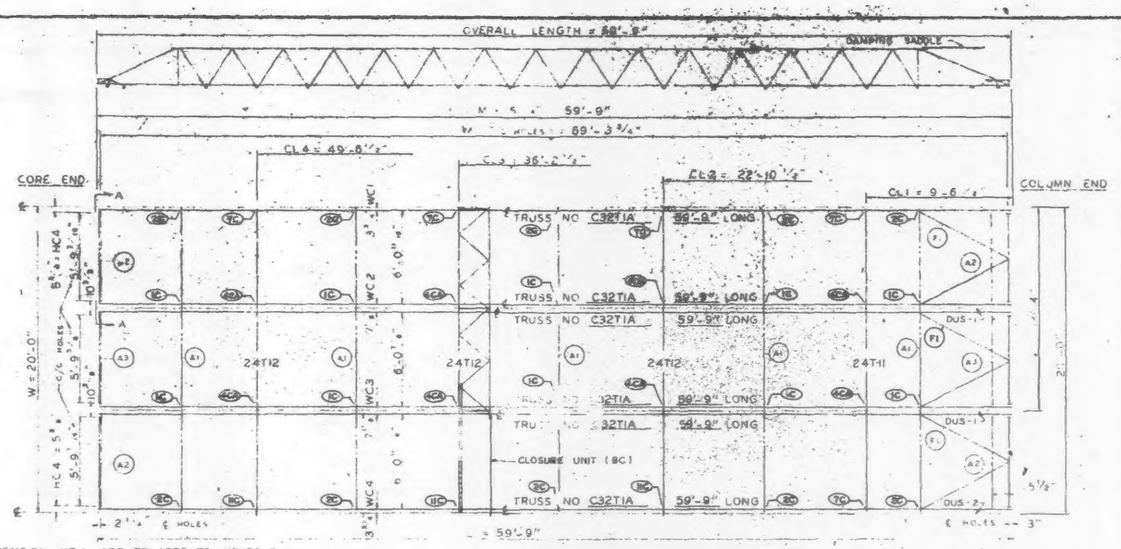
REQUIRED MATERIAL

MATERIAL	MK	PCS		
	T1	5	C32T27N - 57'-9"	ST 8210
	T1B	3	24T13B - 38'-1 1/4"	ST 2138
	T1C	1	24T13C - 38'-1 1/4"	ST 2138C
	A2	2	7"x2"x1/4"x5'-1"	ST 403
	A3	4	5"x3"x1/4"x5'-1"	ST 405
	A5OR	4	3"x3"x1/4"x2'-0"	ST 461
	PV1	18	7" x 1'-0"	ST 400
	PV2	18	3" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3/4" x 8 1/2" x 2'-0"	ST 400
	P2	4	5/16" x 3/8" x 1'-8"	ST 400
	P3	1	4 1/2" x 3/8" x 1'-8"	ST 400
	P4	4	7" x 1" x 0'-11"	ST 418
CLOSURE UNIT	BC	3	1/4" D 61-0 1/4" TUBE	ST 2138

NUMERALS AND LETTERS IN ELLIPSES (e.g. (A5)) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 OR CD 220.

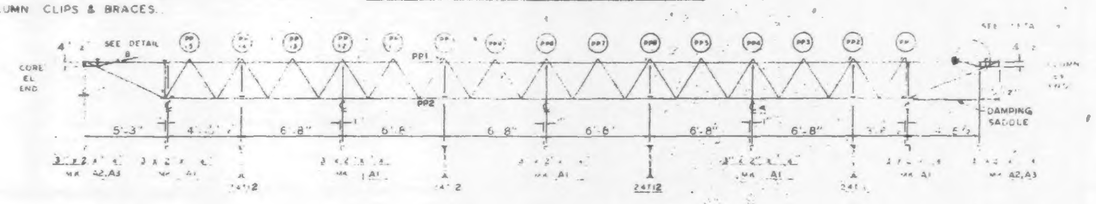
NO	DATE	REVISION	BY
1	4-24-68	AS NOTED	GDC

BLDG. A FLOORS = 44 (WEST ONLY)
TRUSS C26N 1 @ = 57'-9"
BLDG. B FLOORS = 44 (WEST ONLY)
FABRICATION BY: ACIERIE STEEL COMPANY
DESIGN DRAWING NO.
PLATE
DRAWN BY
DATE MARCH 24, 1969
CHECKED BY
DATE MARCH 24, 1969
SHEET CD-C26N

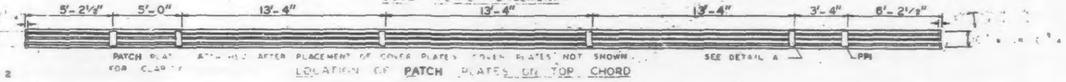


℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

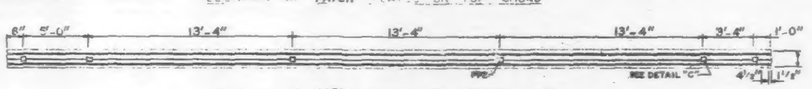
PANEL NO. C1A SIZE 20'-0" x 59'-9"



COVER PLATE PLACEMENT

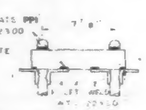


LOCATION OF PATCH PLATES ON TOP CHORD



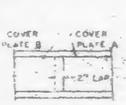
LOCATION OF PATCH PLATES ON BOTTOM CHORD

DETAIL A



SECTION B-B

DETAIL F



DETAIL E

COVER PLATES 5/8" DIA THICK

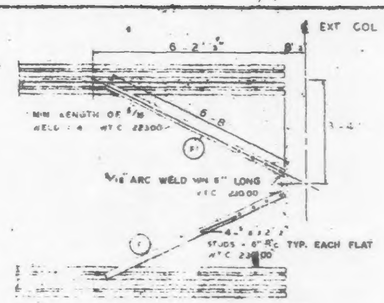
DETAIL C

SECTION E-E

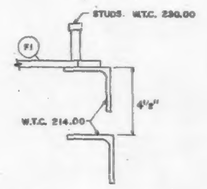
DETAIL F

DETAIL G

1. ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E 70 SERIES OR EQUAL.
2. UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.
3. PUNCH COVER PLATES OVER END STIFFENERS WELD 22300



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 22300



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1A	6	C32T1A – 59'-9	ST201A
BRIDGING TRUSSES	T11	1	24T11 – 19'-11"	BT211
	T12	3	24T12 – 19'-11"	BT212
3"x2"x1/4" ANGLE	A1	5	3"x2"x1/4 x 19'-11"	ST 403
	A2	4	3"x2"x1/4 x 5'-11 5/8"	ST 403
	A3	2	3"x2"x1/4 x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 5/16" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4" x 2'-9"	ST 400
	PP2	18	3"x 3/8" x 2'-3"	ST 400
COVER PLATES	A	3	9"x .0135"x13'-11 1/2"	ST 303
	B	6	9"x .0135"x 15'-2"	ST 303
	C	3	9"x .0135"x13'-2 1/2"	ST 303
	D	3	9"x .0135"x 2'-1"	ST 303
ANGLE CLIPS	CL1	21	2"x1 1/2"x 1/4"x 0'-6	ST 400
7/8" SHEAR ANCHOR	SA2	12	7/8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3 1/2"x3 1/2"x 5/8"x3'-8 7/8"	ST 298
	DUS 2	1	3 1/2"x3 1/2"x 5/8"x3'-8 7/8"	ST 298
CONNECTION BAR	CB1	4	1 4"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-6x1 1/2"x 1 1/4"x	BT212
			230 x 6'-6 1/2"	CD 204
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
4	7-17-68	GENERAL	T.M.C.

DRW	DRW 1,3,1 & 3B	5-6-68
	DRW 2 & 15	
	DRW 4A	
	DRW 5	
	DRW 6	
	DRW 7	
	DRW 42	
	DRW 43 & 47	
	ST A84-42	4-1-68

FLOOR PANEL DETAILS FOR NORFOLK NAVAL SHIPYARD FOR THE DEPT. OF THE NAVY – NEW YORK AUTHORITY

BLDG A [illegible] CONSISTING OF 49 BAYS, 60 55 LB. PER SQ FT PANEL CAP. 20'-0" x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. ST 201 7 4-1-68 PLATE

APPROVED FOR FABRICATION BY [illegible] FOR NORFOLK DATE 8/16/68

APPROVED FOR FABRICATION BY LACLEDE STEEL CO. DATE

DETAILED BY J.A.C. WEBER

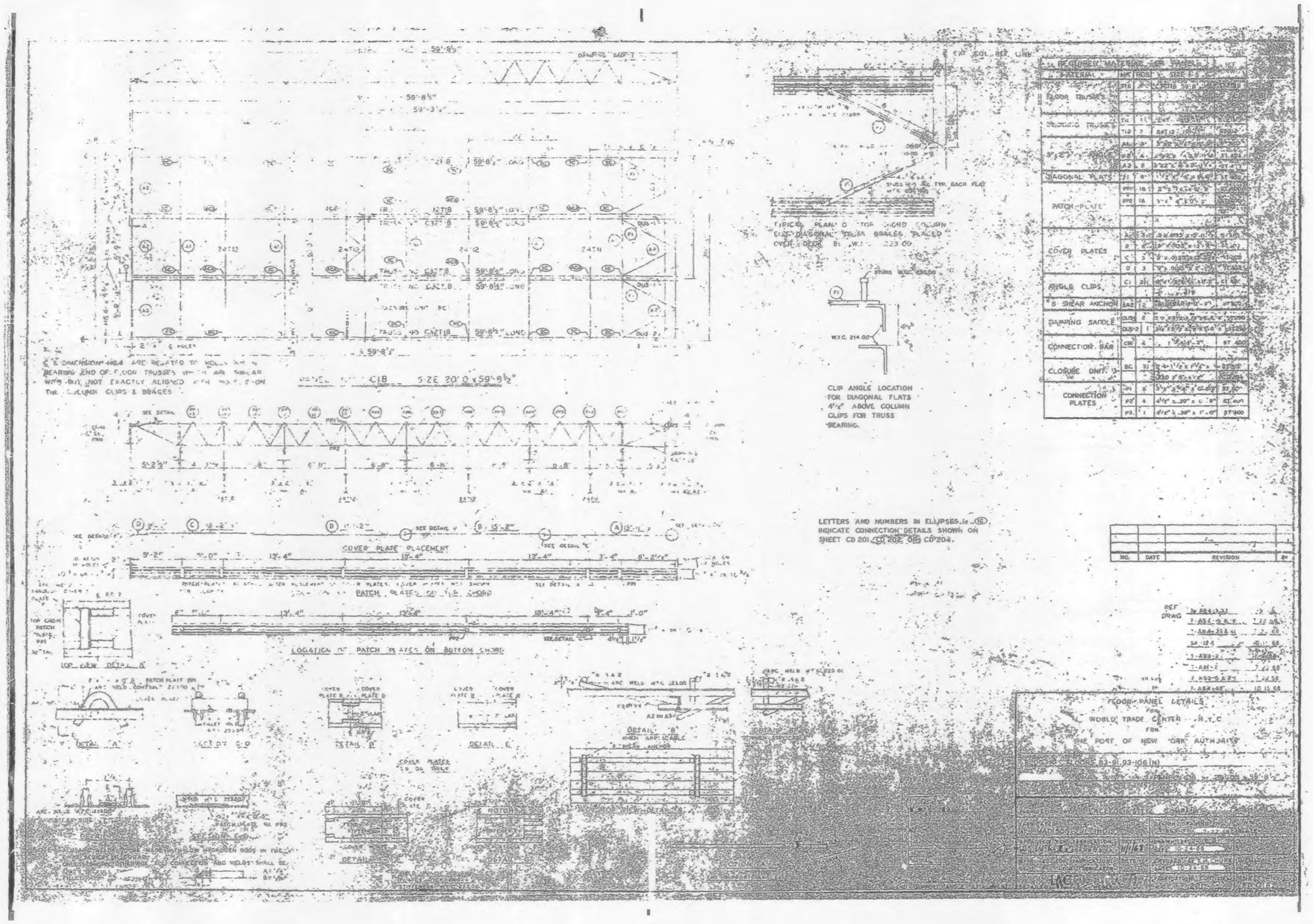
DRAWN BY [illegible] DATE APRIL 10, 1968

CHECKED BY J.R. PAUL DATE APRIL 10, 1968

IN CHARGE OF DES. DEV.

FABRICATION CONT. NO. WT 221

SHEET NO. FP C1A



MATERIAL	MK	PCS	SIZE	WT
FLOOR TRUSSES				
CLOSING TRUSS				
9"x2½" ANGLE				
DIAGONAL FLATS				
PATCH PLATE				
COVER PLATES				
ANGLE CLIPS				
¾" SHEAR ANCHOR				
DAMPING SADDLE				
CONNECTION BAR				
CLOSURE UNIT				
CONNECTION PLATES				

59'-8"

59'-8"
59'-2¼"

59'-8"

32TIC 59'-8" LONG

32TIC 59'-8" LONG

4½12 24TH

TRUSS NO C32TIC 59'-8" LONG

TRUSS NO C32TIC 59'-8" LONG

TRUSS NO C32TIC 59'-8" LONG

DUS-13

DUS-21

2 @ 29'-11½" = 5 BOLES

= 59'-8"

PANEL - O C C - SIZE 20'-0" x 59'-8"

½ & DIMENSION NO.4 ARE RELATED TO HOLES DRILLED IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES IN THE COLUMN CLIPS & BRACES.

SEE DETAIL

CORE EA END

5'-2" 5'-8" 5'-8"

SEE DETAIL D

SEE DETAIL E

COVER PLATE PLACEMENT

5'-1½" 1'-0" 13'-4" 13'-4" 13'-4" 1'-2½"

PATCH PLATE ATTACHED AFTER PLACEMENT OF LOWER PLATES COVER PLATES NOT SHOWN

SEE DETAIL E

LOCATION OF PATCH PLATES ON TOP CHORD

13'-4" 13'-4" 13'-4" 1'-0"

SEE DETAIL 2C

LOCATION OF PATCH PLATES ON BOTTOM CHORD

TYPICAL PLAN OF TOP CHORD PANEL END DIAGONAL TRUSS BRACES PLACED OVER DECK. BY WTC - 823 00

TYP EACH FLAT

WTC 214 00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK MARKS	SIZE		
FLOOR TRUSSES	TIC	2	32TIC 59'-8"	
BRIDGING TRUSSES	TIB	3	24TIB - 19'-1½"	
ANGLES	A1	8		ST 400
	A2	2		ST 400
	A3	2		ST 400
DIAGONAL FLATS	DF1	4		ST 400
PATCH PLATES	PP1	16		ST 400
	PP2	16		ST 400
COVER PLATES	A	2		ST 400
	B	2		ST 400
	C	2		ST 400
	D	2		ST 400
ANGLE CLIPS	AC1	22		ST 400
	AC2	12		ST 400
BRIDGING SADDLE	DUS-2	2		ST 400
	DUS-3	1		ST 400
CONNECTION BAR	CB1	4		ST 400
CLOSURE UNIT				
CONNECTION PLATES*	PL	5		ST 400
	P2*	4		ST 400
	P3	1		ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie (C2), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO	DATE	REVISION	BY

DETAIL B WHEN APPLICABLE

VIEW DETAIL 2B

DETAIL C

SECTION B-B

DETAIL D

DETAIL E

DOOR FRAMES DETAILS

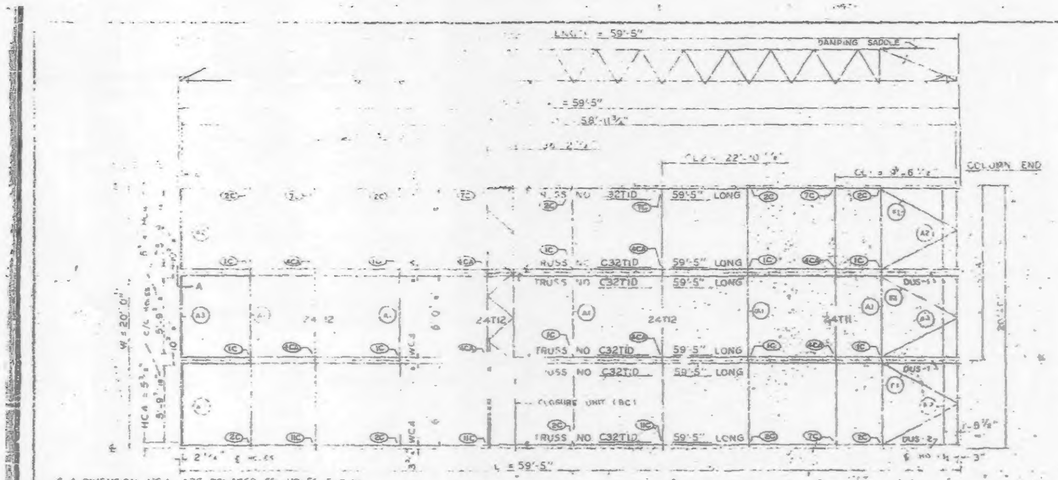
WORLD TRADE CENTER

FOR

THE PORT OF NEW YORK AUTHORITY

FLOORS 49-58, 60-66, 68-76, 79-81, 93 (DELS)

TYPICAL DIA. & CLIP ANGLES IN 59'-8"


LNGTH = 59'-5"
DAMPING SADDLE
58'-11¾"
COLUMN END
TRUSS NO C32TID 59'-5" LONG
CLOSURE UNIT (BC)
W = 20'-0"
24T12
4TH
DUS-1
DUS-2
HC4
HC5
HC6
HC7
HC8
HC9
HC10
HC11
HC12
HC13
HC14
HC15
HC16
HC17
HC18
HC19
HC20
HC21
HC22
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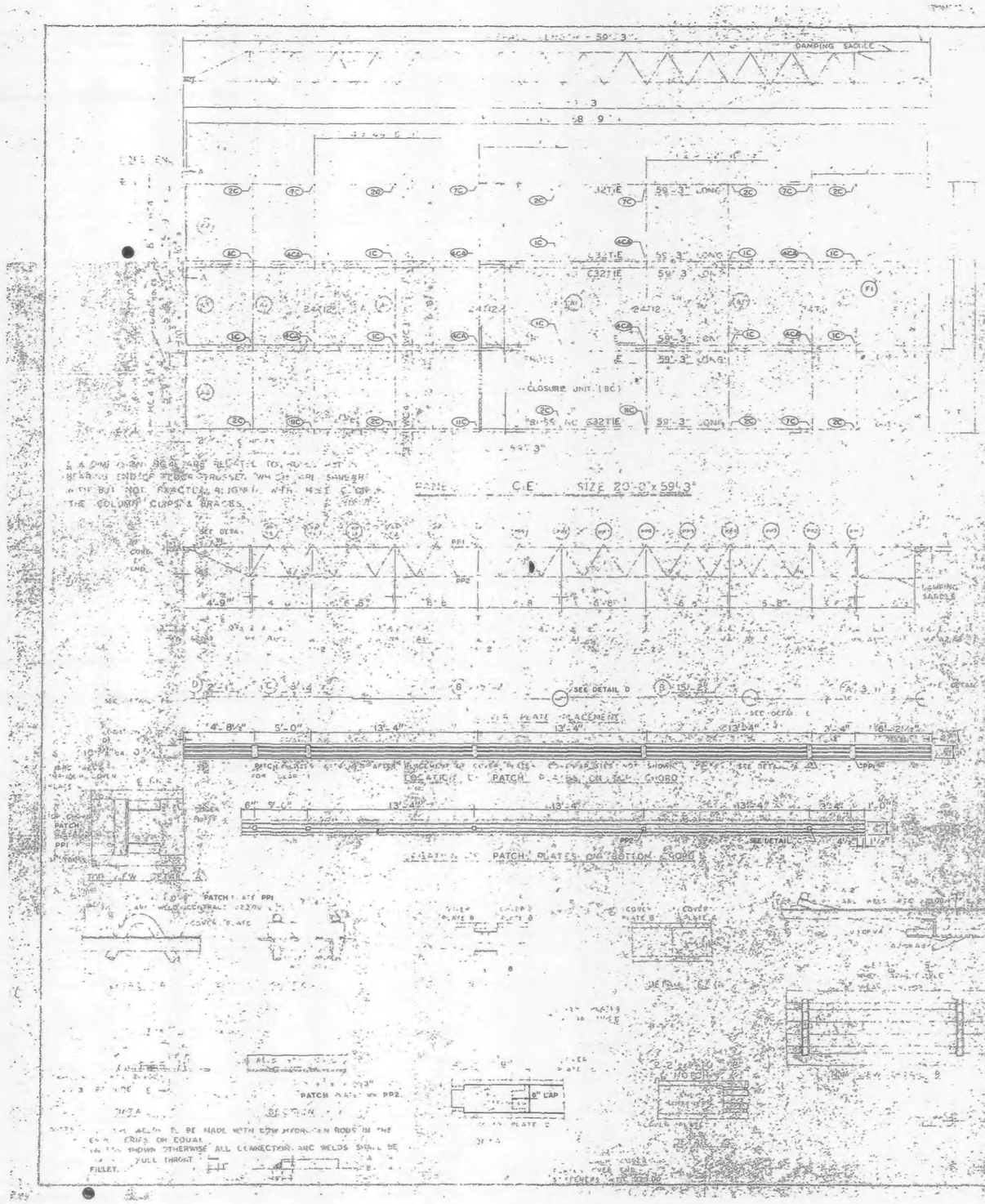
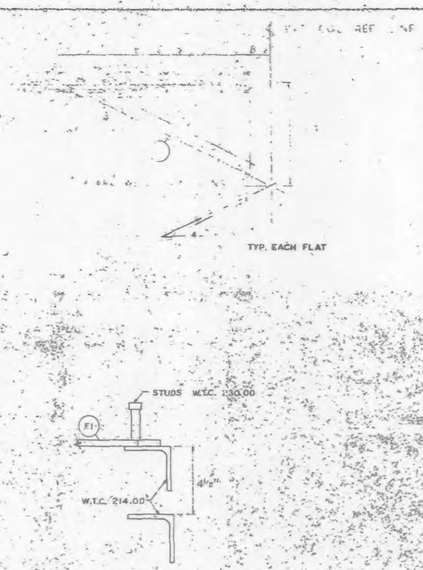
HC38
HC39
HC40
HC41
HC42
HC43





REQUIRED MATERIAL PER PANEL					MAT'L GRADE
MARK	TYP.				
	E		E	3	E
					ST 400
					ST 400
					ST 400
					ST 400
	PP1	18			ST 400
PATCH PLATES	PP2	18		3"	ST 400
ANGLE CLIP					ST 400
SHEAR ANCHOR	SA2	9		5 REQ'D = 0'-9"	ST 400
DIAPHRAGM PLATE					ST 296
					ST 298
CONNECTION BAR	CB1	4		1'-3"	ST 400
CLOSURE UNIT	BC	3			BT 212
				210 = 6'-8½"	CD 204
CONNECTION PLATES	P1	5			ST 400
	P2	4			ST 400
	P3	1			ST 400

LETTERS AND NUMBERS IN ELLIPSES ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
4	7-17-68	GENERAL	T.M.C.

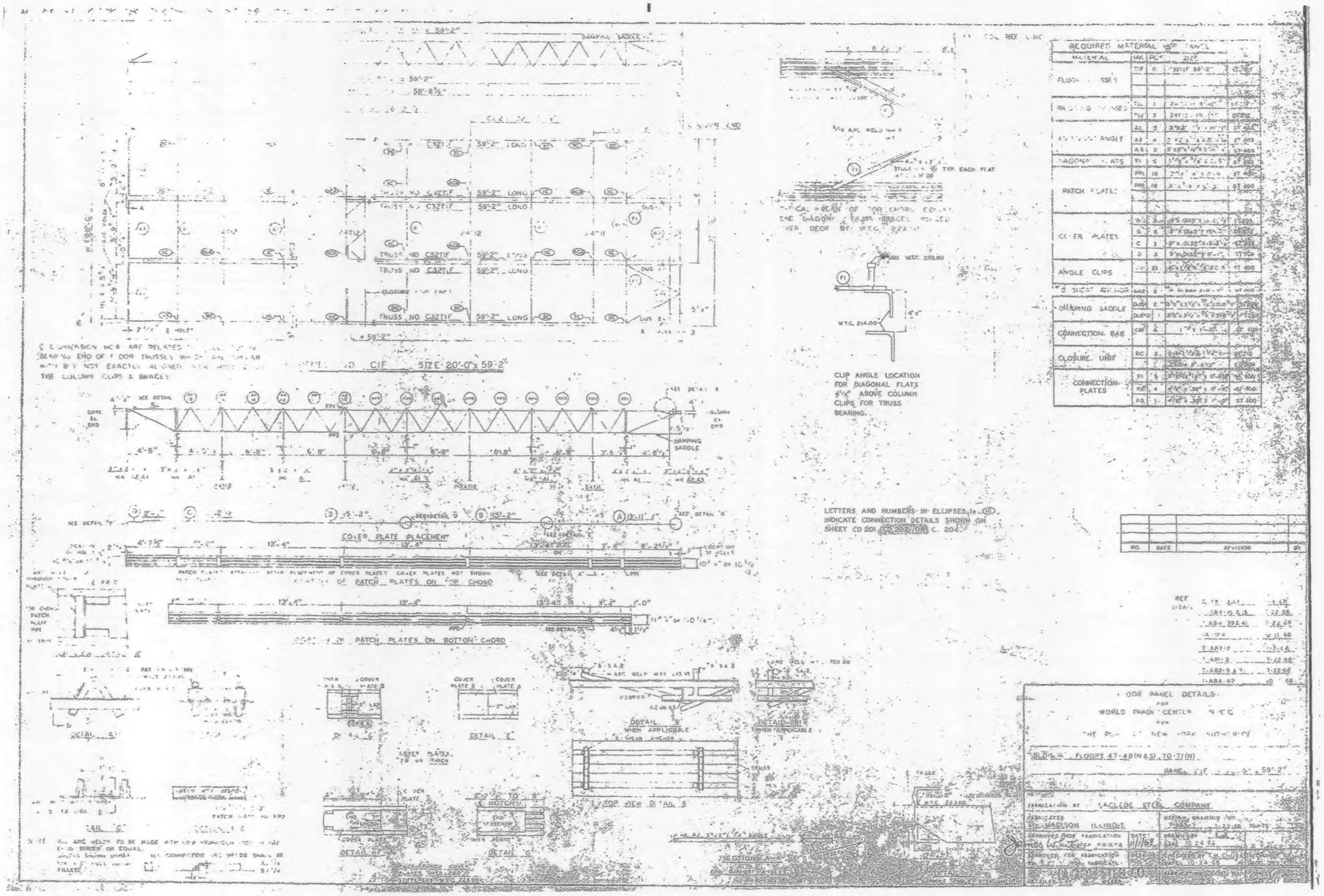
	3.59
	5-6-68
	L 3.58
	C 20-61
	1-3-68
	2.5.68
	K 5.58
	C 1.69

10-11 (NORTH & SOUTH)

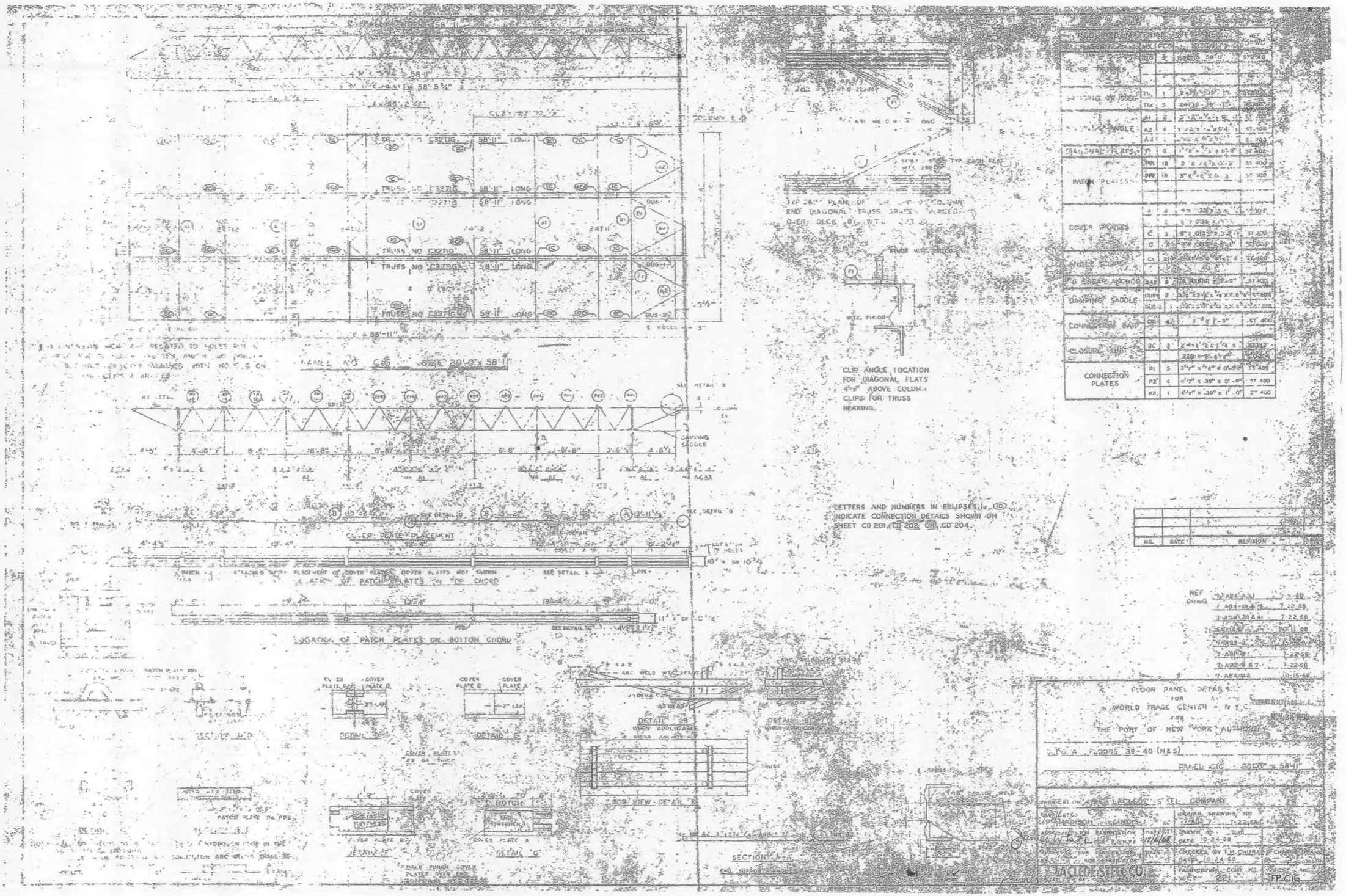
CIE

EAGLE STEEL CO.

DRAWN BY		DATE APRIL 10, 1968	
CHECKED BY	J.R. PAUL	DATE APRIL 13, 1968	IN CHARGE OF 1900 DEN
FABRICATION CONT. NO.	221		SHEET NO. FD CIE


DAMPING SADDLE
TRUSS NO C32T1F 59'-2" LONG
CLOSURE UNIT
SIZE 20'-0" x 59'-2"
COVER PLATE PLACEMENT
PATCH PLATES ON TOP CHORD
PATCH PLATES ON BOTTOM CHORD
DETAIL 'A'
DETAIL 'B'
DETAIL 'C'
DETAIL 'D'
DETAIL 'E'
DETAIL 'F'
DETAIL 'G'
SECTION
TOP VIEW DETAIL 'B'
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
REQUIRED MATERIAL
LETTERS AND NUMBERS IN ELLIPSES (e.g. (C)) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201 (CD 202, CD 203 & C. 204)
NO. DATE REVISION BY
ROOF PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG'S. FLOORS 47-48 (N&S), 70-71 (N)
PANEL SIZE 20'-0" x 59'-2"
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON ILLINOIS
APPROVED FOR FABRICATION
FOREMEN FOR FABRICATE
DESIGN, DRAWING AND DETAILS
DRAWN BY
CHECKED BY
SHEET OF SHEETS

					WT. (PCS)		NET WT.
CHORD	TRUSSES	TG	5	32TIG	58'-11"		ST 2NG
WEB MEMBERS		T1	1	24T18	58'-5¾"		ST 2NG
		T1c	5	24T18	58'-5¾"		ST 2NG
	ANGLE	A1	8	3"x3"x¼"x 5'-4"			ST 400
		A2	4	3"x3"x¼"x 5'-4"			ST 400
		A3	1	3"x3"x¼"x 4'-5½"			ST 400
DIAGONAL FLATS		F1	6	1"x8"x 8'-5"			ST A36
PATCH PLATES		PP1	18	2"x8"x 2'-3"			ST 400
		PP2	18	3"x8"x 2'-3"			ST 400
COVER PLATES		A	3	9"x .375"x 5'-3"			ST 400
		C	3	9"x .625"x 5'-3"			ST 400
		G	3	11½"x .625"x 5'-3"			ST 400
ANGLE CLIPS		C1	21	3½"x3½"x¼"x 6"			ST 400
¾ Ø SHEAR ANCHOR		SA2	9	¾ Ø STUD BAR 1'-0"			ST 400
DAMPING SADDLE		DUS	2	3½"x3½"x⅜"x 6'-6"			ST 400
		DUS-2	1	3½"x3½"x⅜"x 6'-6"			ST 400
CONNECTION BAR		CB1	4	1"x 1'-3"			ST 400
CLOSURE UNIT		BC	3	2"x11"x 6'-1"			ST A572
				2"x8"x 6'-1"			ST A572
CONNECTION PLATES		P1	5	3½"x 3½"x ⅜" x 0'-8"			ST 400
		P2	4	4½" x .390" x 0'-10"			ST 400
		P3	1	4½" x .390" x 1'-0"			ST 400

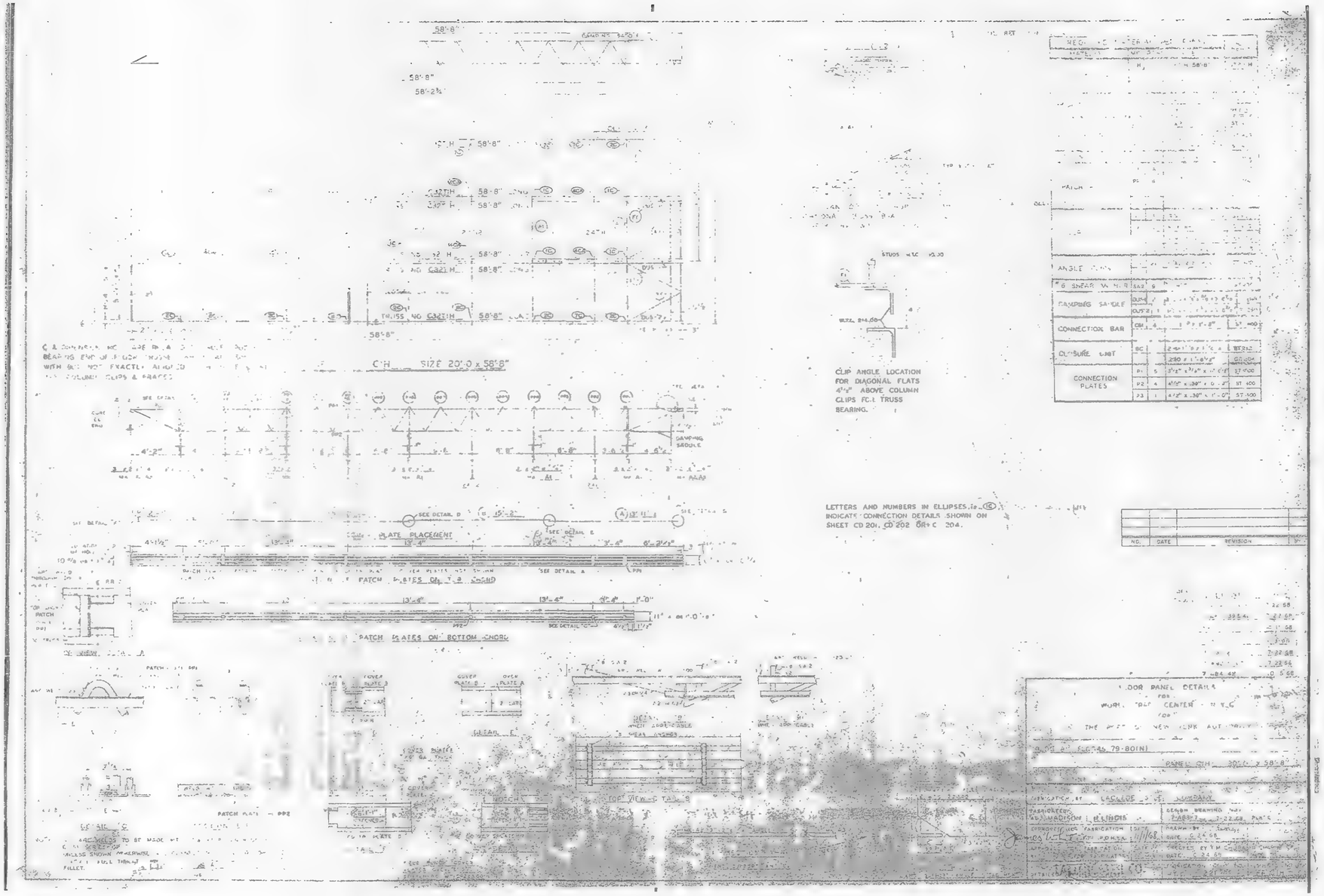


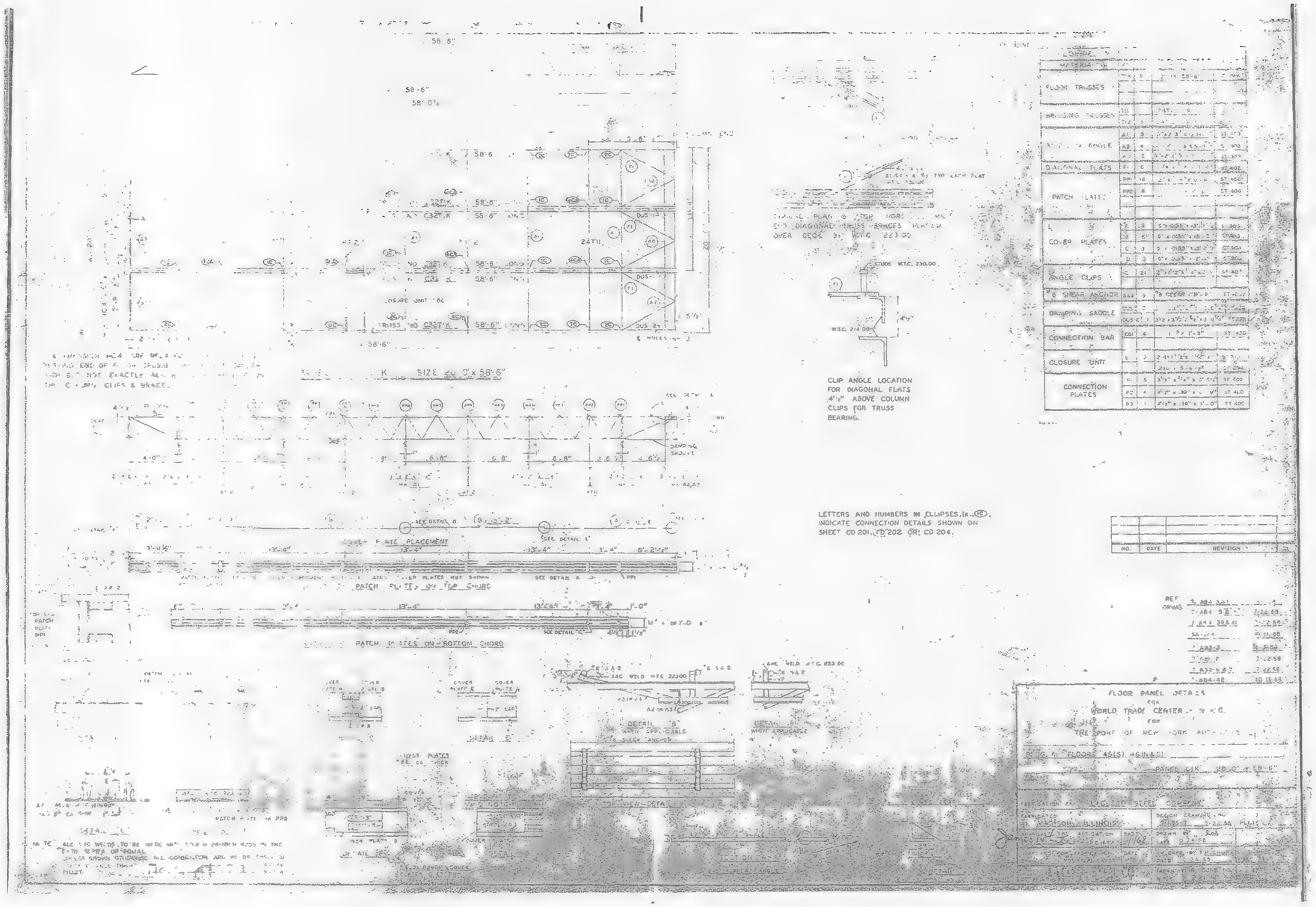
NO.	DATE	REVISION

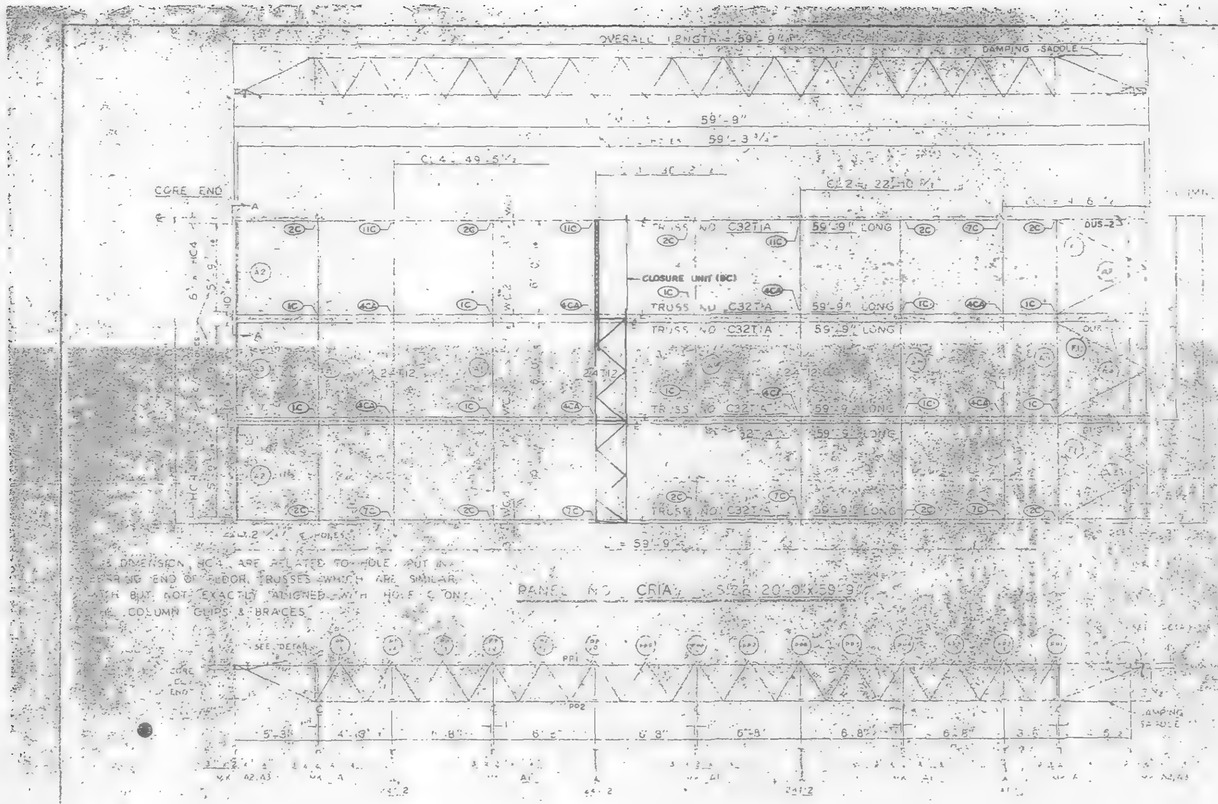
REF DWGS		
1 AB4-39 & 41	7-22-68	
2 AB4-42 & 43	7-22-68	
3 AB4-44 & 45	10-11-68	
4 AB3-2	7-22-68	
5 AB1-2	7-22-68	
6 AB2-6 & 7	7-22-68	
7 AB4-22	10-15-68	

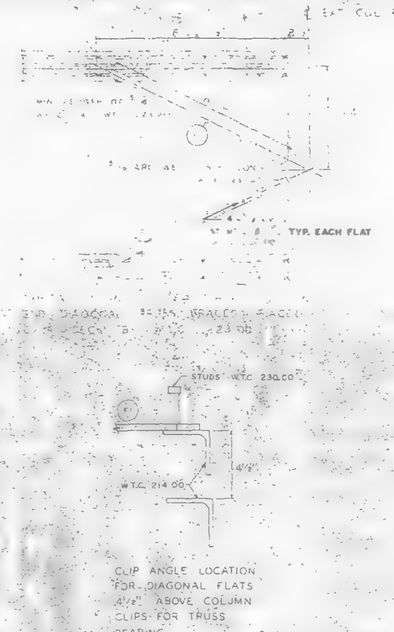
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
FLOORS 39-40 (N&S)
PANEL C16 20'-0" x 58'-11"

FABRICATED BY LACLEDE STEEL COMPANY		DRAWING NO. 7-2568 7	7-22-68
APPROVED BY MADISON, ILLINOIS	REVISION	DRAWN BY	
APPROVED FOR FABRICATION	DATE 12/6/68	DATE 10-24-68	
APPROVED FOR ERECTION	DATE	CHECKED BY T.M. CHURAZY	CHECKED
		DATE 10-24-68	
LACLEDE STEEL CO.		FABRICATION CONT. NO. 22	SHEET NO. FP C16


58'-8"
58'-2¾
CAMBERING SADDLE
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 & CD 204.
PLATE PLACEMENT
PATCH PLATES ON TOP CHORD
PATCH PLATES ON BOTTOM CHORD
SEE DETAIL A
SEE DETAIL B
SEE DETAIL C
SEE DETAIL D
SEE DETAIL E
NO.
DATE
REVISION


58'-6"
58'-0⅛
24T11
K 512E 60 0" x 58'-6"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR; CD 204.
PATCH PLATES ON TOP CHORD
PATCH PLATES ON BOTTOM CHORD
DETAIL "B" WHEN APPLICABLE
DETAIL "D" WHEN APPLICABLE
FLOOR PANEL DETAILS
WORLD TRADE CENTER
THE PORT OF NEW YORK AUTHORITY
FLOORS 45(S) 46(N&S)
PANEL SIZE 10'-0" x 58'-6"
FABRICATED BY LACLEDE STEEL COMPANY
ERECTED BY WASHINGTON, ILLINOIS
DESIGN DRAWING NO. 22-58 SHEETS 10
DATE OF FABRICATION 7/1/68
DRAWN BY JMS
DATE 2/14/68
DATE OF ERECTION
CHECKED BY M. CHERRY
DATE 2-14-68
FABRICATION
REVISION
NO. DATE
REF DRAWG
S-A84-2A1 1-26-68
S-A84-3&4 1-26-68
S-A84-3&4 1-26-68
S-A84-5A1 10-11-68
S-A84-5A2 5-2-68
S-A84-6&7 7-2-68
S-A84-6&7 7-22-68
S-A84-AR 10-15-68





REQUIRED MATERIAL PER PANEL				SEE DRWG.
MATERIAL	MK	QTY	SIZE	

REQUIRED MATERIAL PER PANEL				REF. DRWGS.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1B	6	C32T1B - 59'-8 1/2" LONG	S-2016
SHORING TRUSSES	T1	1	24"± - 8'-11"	ST-212
	T12	3	24"± - 9'-10"	ST-212
3"x2 1/2" x 1/4" ANGLE	A1	5	3"x2 1/2"x 1/4"x 8'-11"	ST-403
	A2	4	3"x2 1/2"x 1/4"x 5'-11"	ST-403
	A3	2	3"x2 1/2"x 1/4"x 5'-10"	ST-403
DIAGONAL PLATES	P1	6	1'-1"x 1'-6"x 5'-8"	ST-402
PATCH PLATES	PP1	18	3"x 2'-3" x 4'-3"	ST-400
	PP2	18	3"x 7/8" x 10'-3"	ST-400
COVER PLATES	A	3	9"x.0135"x 13'-2"	ST-303
	B	6	9"x.0135"x 15'-2"	ST-303
	C	3	6"x.0135"x 13'-2"	ST-303
	D	3	6"x.0135"x 2'-1"	ST-303
ANGLE CLIPS	C1	24	2"x1 1/2"x 4"x 0.6"	ST-400
3/4" ø SHEAR ANCHOR	SA2	12	6" REBAR x 0'-0"	ST-206
DAMPING SADDLES	DUS1	2	13 1/2"x3 1/2"x 7/8"x 3'-8 1/2"	ST-298
	DUS-2	2	3 1/2"x3 1/2"x 7/8"x 8'-6"	ST-298
CONNECTION BAR	CB1	4	1"ø x 1'-3"	ST-400
CLOSURE UNIT	BC	3	2'-4"±1/2"x 1'-1"±1/2"x	ST-212
			.230 x 6'-6"ø	CD-204
CONNECTION PLATES	P1	5	3"x7/8"x 0'-8"ø	ST-400
	P2	4	4"x1"x .390" x 0'-9"	ST-400
	P3	1	4"x1"x .390" x 1'-0"	ST-400

NO.	DATE	REVISION	BY

REF DRWGS
- AB4 331 — 1-3-68
- AB4 5&6 839 — 7-22-68
- AB4 41 — 7-22-68
- AB4 42 — 10-11-68
- AB3 2 — 1-3-68
- AB1 2 — 7-22-68
- AB2 157 — 7-22-68
- AB4-42 — K 12-68

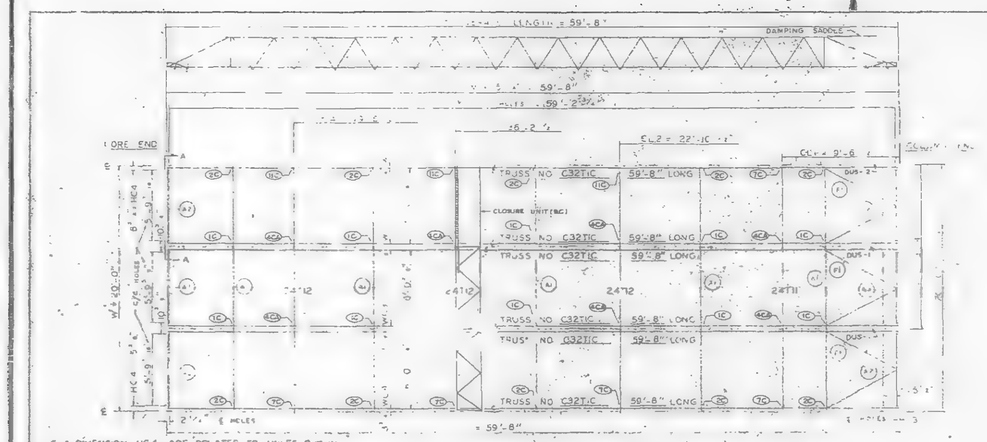
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG NO. FLOORS 83-91 & 93-106 (N)

PANEL CRIB 20'-0" x 59'-8 1/2"

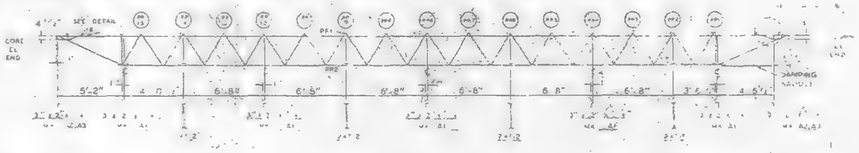
FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT: MADISON, ILLINOIS	DESIGN DRAWING NO: AB3&B: 7-22-68 PLATES
APPROVED FOR FABRICATION: DATE: 11/1/68 FOR PORT AUTH.	DRAWN BY: DATE: OCT 23 1968
APPROVED FOR FABRICATION: DATE: FOR FABRICATOR	CHECKED BY: DATE: OCT 23 1968
DETAILED BY:	FABRICATION CONTROL WT: 221
	SHEET NO: REV. PRICE



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE PARALLEL WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

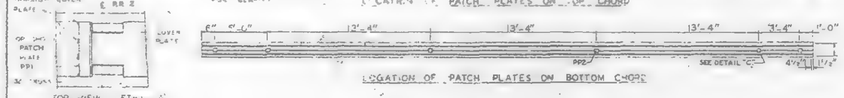
TYPE NO. CR1C SIZE 20'-0" x 59'-8"



COVER PLATE PLACEMENT

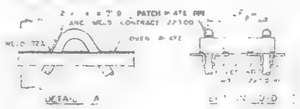
PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY

LOCATION OF PATCH PLATES ON TOP CHORD

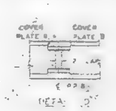


LOCATION OF PATCH PLATES ON BOTTOM CHORD

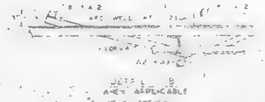
TOP VIEW DETAIL A



DETAIL A



DETAIL B

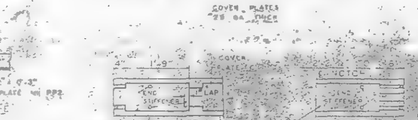


DETAIL E

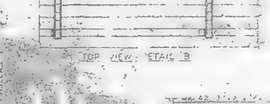
DETAIL C

SECTION E-E

ALL ARC WELDS BY ____ MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 1/4"x2" FULL FILLET.



DETAIL D



DETAIL F

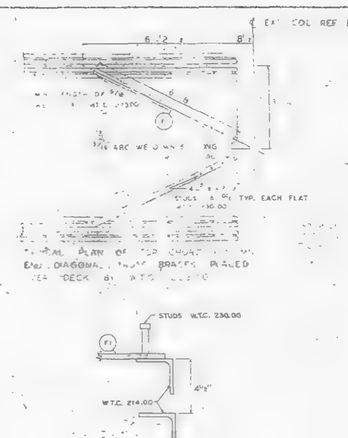
TOP VIEW DETAIL B

SECTION A-A

END SUPPORT ANGLES

DETAIL J

END SUPPORT ANGLE ATTACHMENT



PARTIAL PLAN OF TOP CHORD SHOWING END DIAGONAL FLAT BRACES PLACED FOR DECK BY OTHERS

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK. POS.	NO.	SIZE	REF. DRWG.
FLOOR TRUSSES	TC	6	C32TIC - 59'-8"	ST2IC
BRIDGING TRUSSES	T1	1	24T-1 - 19'-11"	ST2BT
	T2	3	24T-2 - 19'-11"	ST 212
3"x2½"x5/16" ANGLE	A1	5	3"x2½"x5/16"x 19'-11"	ST 403
	A2	4	3"x2½"x5/16"x 5'-11 15/16	ST 403
	A3	2	3"x2½"x5/16"x 5'-11½"	ST 403
DIAGONAL FLATS	F1	6	1'-3"x 3/8"x 8'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4"x 0'-8"	ST 400
	PP2	18	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	A	3	9"x 0.135"x 13'-11½"	ST 303
	B	6	9" x 0.135"x 5'-2"	ST 303
	C	3	9" x 0.135"x 13'-2½"	ST 303
	D	3	9"x 0.135"x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2"x1 1/8"x1/4"x0'-6"	ST 400
⅝" Ø SHEAR STUD	SAS	12	⅝" Ø STUD x 0'-8"	ST 400
DAMPING SADDLE	SH54	2	5" x 2"x3½"x 3/8"x3'-8 3/8"	ST288
	SH52	1	5" x 2"x3½"x 3/8"x3'-8 3/8"	ST298
CONNECTION BAR	CB	4	1'-8" x 1"-3"	ST 400
CLOSURE UNIT	BC	3	2-4x11½"x 1 1/4" x	ST212
			230 x 0'-8 1/8"	CD204
CONNECTION PLATES	P1	5	1'-0" x 3/8" x 0'-6 1/4"	ST 400
	P2	4	1'-0" x .38" x 0'-9"	ST 400
	P3	1	1'-0" x .38" x 1'-0"	ST 400

"LETTERS AND NUMBERS IN ELLIPSES, ie. (1E) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

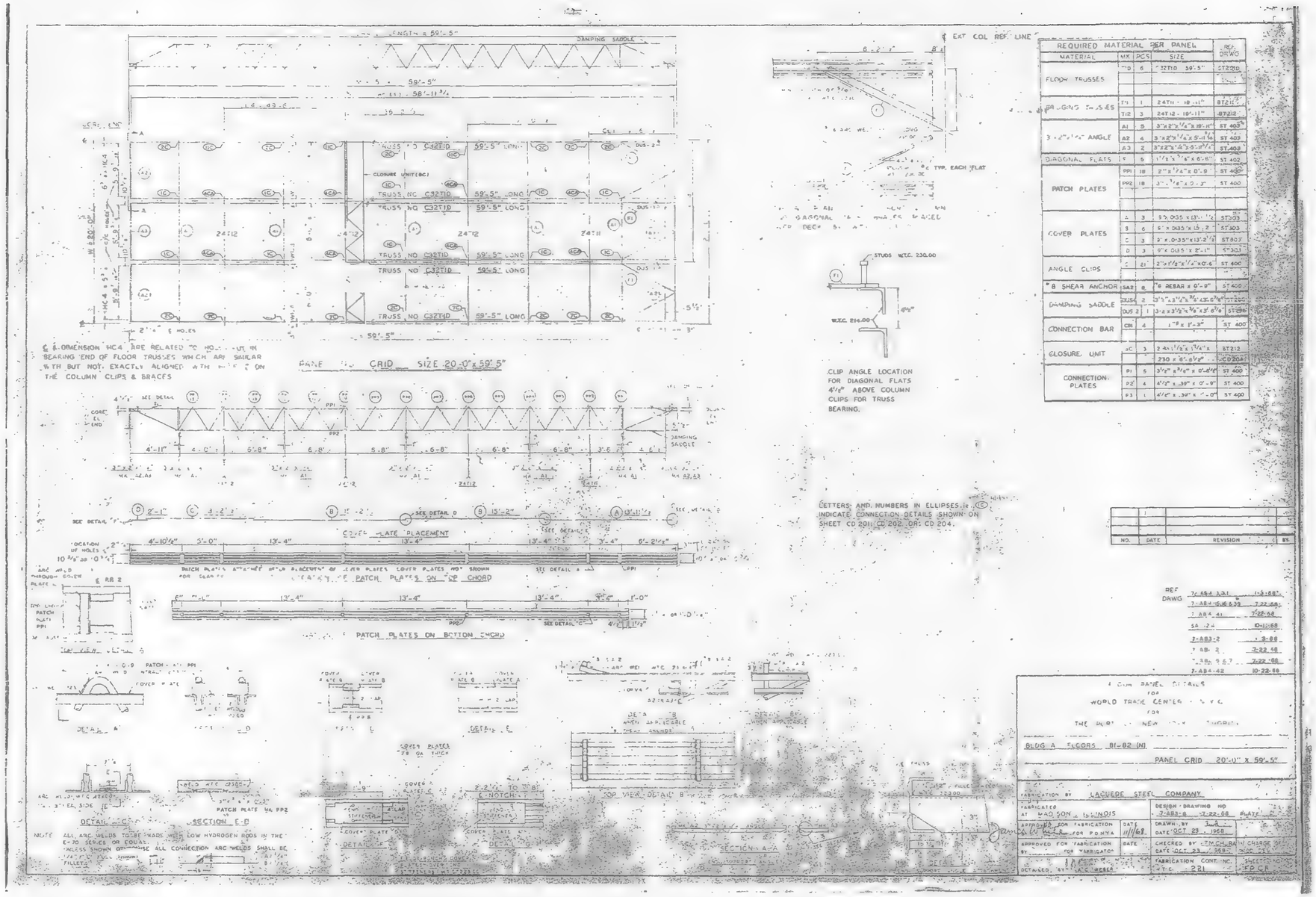
REF DRAWS
- AB4 331 1-3-68
- AB4 15,16&39 7-22-68
- AB4 41 7-22-68
- SA 17A 10-11-66
- AB3-7 1-3-68
- AB1 7-22-68
- AB1 5 & 7 7-22-68
- AB4-42 10-22-68

PANEL DETAILS
FOR
WORLD TRADE CENTER
THE PORT OF NEW YORK AUTHORITY

SHOP PIECES 49-58, 60-66, 68-74, 79-91 & 93-106 (S)

PANEL CR1C 20'-0" x 59'-8"

FABRICATED BY	LACLEDE STEEL COMPANY		
FABRICATION	ALTON, ILLINOIS	DESIGN DRAWING NO.	7-331 A 7-22-68
APPROVED FOR FABRICATION	DATE 11/1/68	DRAWN BY	DATE OCT 23 1968
APPROVED FOR FABRICATION	DATE	CHECKED BY	DATE OCT 23 1968
DETAILED BY		FABRICATION CONT. NO.	WTC 221



REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF DRWG
FLOOR TRUSSES	TD	6	C32TID 59'-5"	ST2210
RAKING TRUSSES	TH	1	24TH - 18'-11"	ST212
	TI2	3	24TI2 - 18'-11"	ST212
3"x3"x1/4" ANGLE	A1	5	3"x3"x1/4"x 18'-11"	ST 403
	A2	6	3"x3"x1/4"x 5'-11 15/16	ST 403
	A3	2	3"x3"x1/4"x 3'-10 1/4"	ST 403
DIAGONAL FLATS	F	6	1'1/2"x 3/8"x 6'-6"	ST 402
PATCH PLATES	PP1	18	2'-7 1/4"x 1'-0"x 0'-9	ST 400
	PP2	18	3'-1/8"x 1'-0"x 3"	ST 400
COVER PLATES	A	3	9"x 0.035"x 13'-1 1/2"	ST303
	B	6	9"x 0.035"x 15'-2"	ST303
	C	3	9"x 0.035"x 13'-2 1/2"	ST303
	D	3	9"x 0.035"x 2'-1"	ST303
ANGLE CLIPS	C	21	2"x1"x2"x1/4"x0'-6"	ST 400
3/4" ø SHEAR ANCHOR	SA2	8	3/4" ø REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS 1	2	3"x3"x3/8"x 13'-6 7/8"	ST 206
	DUS 2	1	3-2"x3"x3/8"x 3'-6 7/8"	ST 206
CONNECTION BAR	CB	4	1'-8"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2"x1"x2"x 1'-1"x	ST 212
			230 x 6'-8 1/8"	C0202
CONNECTION PLATES	P1	5	3'-0" x 8'-8" x 0'-0 1/2"	ST 400
	P2	4	4'-1" x .39" x 0'-9"	ST 400
	P3	1	4'-1" x .39" x 1'-0"	ST 400

NO.	DATE	REVISION	BY

REF DRWG

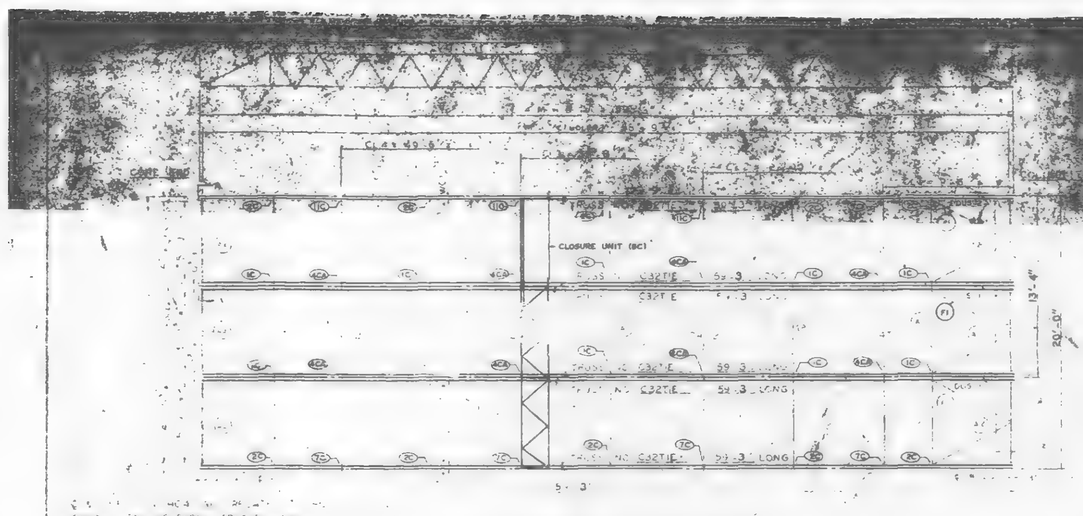
7-AB4-1,21	1-3-68
7-AB4-15,16 & 39	7-22-68
7-AB4-41	7-22-68
SA-24	10-11-68
7-AB3-2	1-3-68
7-AB-2	3-22-68
7-AB-9 & 7	7-22-68
7-AB4-42	10-22-68

STEEL PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

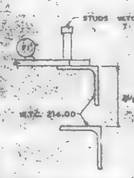
BLDG A FLOORS 81-82 (N)

PANEL GRID 20'-0" x 59'-5"

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN - DRAWING NO	7-AB3-8 ST-22-68 PLATE
APPROVED FOR FABRICATION BY	DATE 11/1/68	DRAWN BY	DATE OCT 23, 1968
APPROVED FOR FABRICATION BY	DATE	CHECKED BY	DATE OCT 23, 1968
DETAILED BY		FABRICATION CONT. NO.	SHEET NO.
		W.T.C. 221	CD CR



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.



LETTERS AND NUMBERS IN ELLIPSES (e.g. (1C)) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

MARK	QTY	DESCRIPTION	SPEC
PATCH PLATES	PP1	18	2" x 4" x 9"	ST 400
	PP2	19	3/8" x 1'-3"	ST 400
COVER PLATE	A	3	9" x 2'-0" x 1'-2"	ST 300
	B	6	9" x 1'-3" x 1'-2"	ST 300
	C	3	1/4" x 1'-3" x 2'-1"	ST 300
	D	3	1/4" x 1'-3" x 2'-1"	ST 300
ANGLE CLIPS	C1	21	2 1/2" x 2" x 1'-0"	ST 400
Ø SHEAR ANCHOR	SAB	9	Ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	DMSB	2	3/8" x 3 1/2" x 3/8" x 2'-6 1/4"	ST 298
	DLS-2	1	3/8" x 3'-2 1/2" x 3/8" x 3 Ø 3/8	ST 298
CONNECTION BAR	CBR	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-8x11 1/2" x 1 1/2" Ø	ST 212
			230 x 61.61/8"	CD 203
CONNECTION PLATES	B1	8	3 1/2" x 3'-0 1/2" x 0'-0 1/2"	ST 400
	P2	4	8 1/4" x .38" x 0'-9"	ST 400
	P3	1	8 1/4" x .38" x 1'-0"	ST 400

NO	DATE	REVISION	BY
2	10-15-68	MAT'L LIST	G.D.C.
1	7-17-68	GENERAL	T.W.C.

BLDG 4 FLOORS 10-11 (SOUTH)

PANEL CRIE

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATION AT MADISON, ILLINOIS

DESIGN DRAWING NO. 1493 B 4 | 93

APPROVED FOR FABRICATION BY ... FOR ... DATE 10/21/68

DRAWN BY ... DATE APRIL 10, 1968

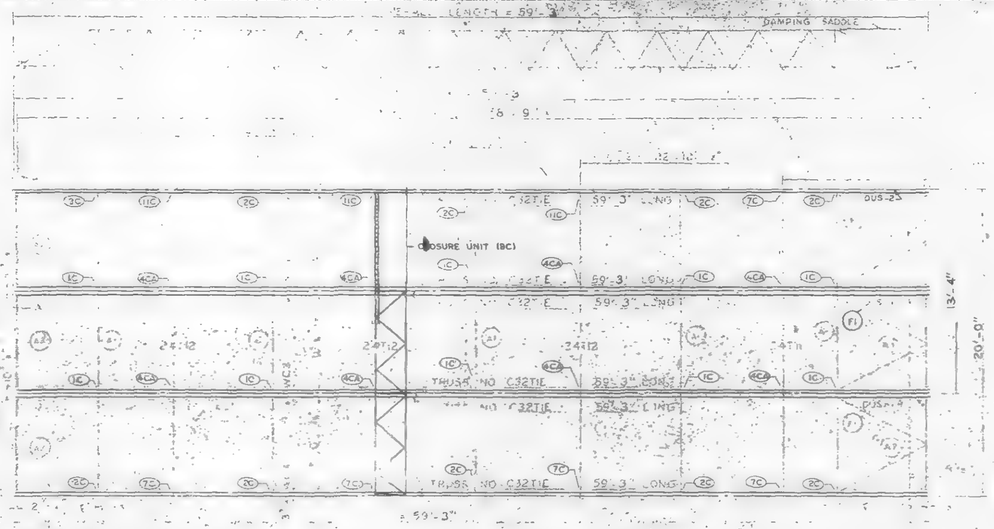
CHECKED BY J.R. PAUL DATE APRIL 10, 1968

FABRICATION CONT. NO. 221

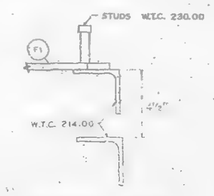
SHEET NO. EP CRIE

DETAILED BY ... CHECKED BY ...

LACLEDE STEEL CO.

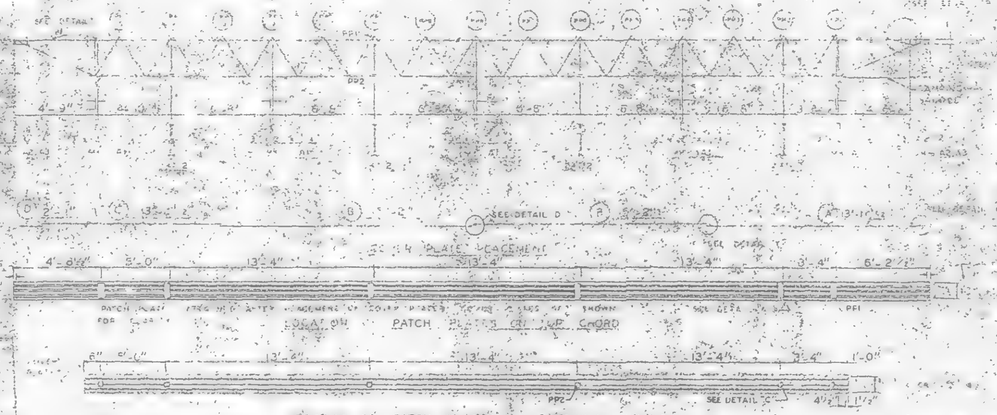


TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4"x3" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

CLOSURE UNIT			
CONNECTION PLATES	D1	5	3'-2" x 1'-8" x 0'-8½" ST 400
	L2	4	4'-0" x 3'-0" x 0'-9" ST 400
	L3	4	4'-0" x 3'-0" x 1'-0" ST 400



LETTERS AND NUMBERS IN ELLIPSES (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	7-1-68	GENERAL	TMC

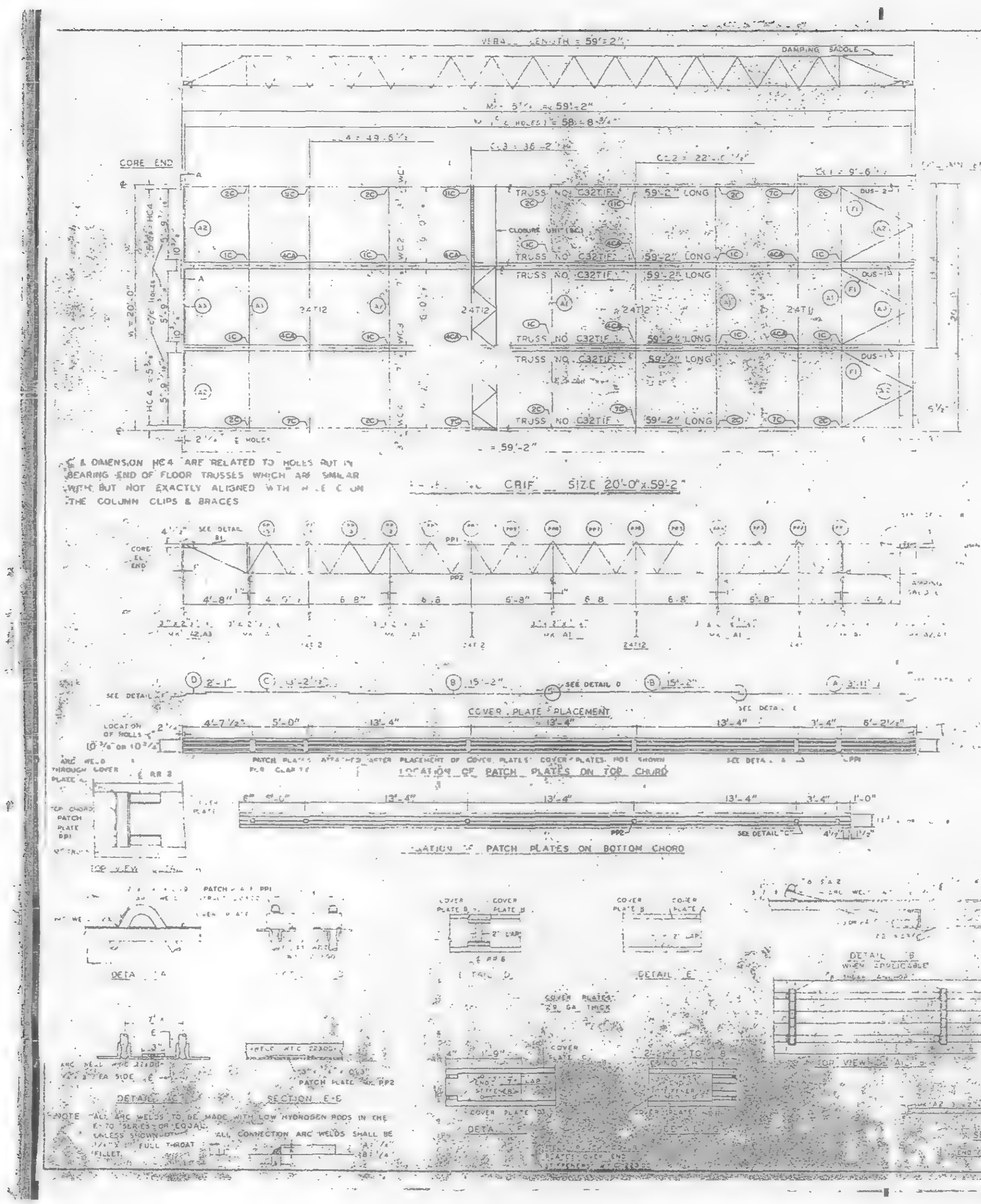
10-11 ISOMETRIC

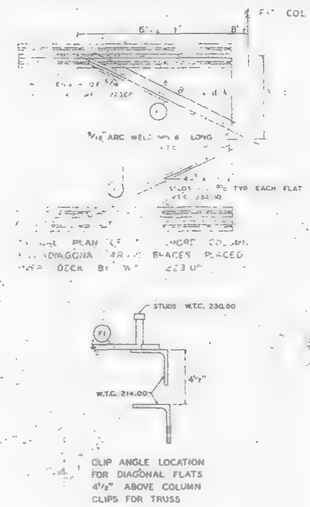
CRIE x

JACKSON STEEL CO

DRAWN BY: 8/16/68
DATE: APRIL 1, 1958
CHECKED BY: F.B. PAUL
DATE: APRIL 1, 1958

CHARGE NO. 8870 DEV.
SHEET NO. FP CRIE





REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS	SIZE	REF. DRWG
FLOOR TRUSSES	TIF	6	C32TIF - 59'-2"	LT2072
BRIDGING TRUSSES	TI1	1	24T11 - 18'-...."	BT21
	TI2	3	24T12 - 19'-...."	BT212
3"x2"x¼" ANGLE	A1	5	3"x2"x¼"x1'-10"	ST 403
	A2	4	3"x2"x¼"x5'-11⅝"	ST 403
	A3	2	3"x2"x¼"x5'-11⅝"	ST 403
DIAGONAL FLATS	F1	5	1½"x 5"x 8'-6⅛"	ST 402
PATCH PLATES	PP1	16	2"x ¼"x 0'-9"	ST 400
	PP2	18	3"x ¼"x 0'-3"	ST 400
COVER PLATES	A	3	37"x0.135"x35'-11½"	ST303
	B	6	9"x 0.135"x 15'-2"	ST303
	C	3	9"x 0.135"x 13'-2⅝"	ST303
	D	3	9"x 0.135"x 2'-1"	ST303
ANGLE CLIPS	C1	21	2"x1½"x¼"x1'-0.5"	ST 400
⅞" ø SHEAR ANCHOR	SA21	9	⅞" ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	13"x3⅛"x⅜"x3'-8⅛"x1½"	ST298
	DUS2	1	13"x1.5"x⅜"x3'-6⅛"	ST298
CONNECTION BAR	CB1	4	1"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2'-4-1⅛"x 1½"x	BT212 .230 x 6'-6¼" CD204
CONNECTION PLATES	P1	5	3½"x 2½"x 0'-6½"	ST 400
	P2	4	6½"x .38" x 0'-8"	ST 400
	P3	1	6½"x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie. (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO	DATE	REVISION	BY

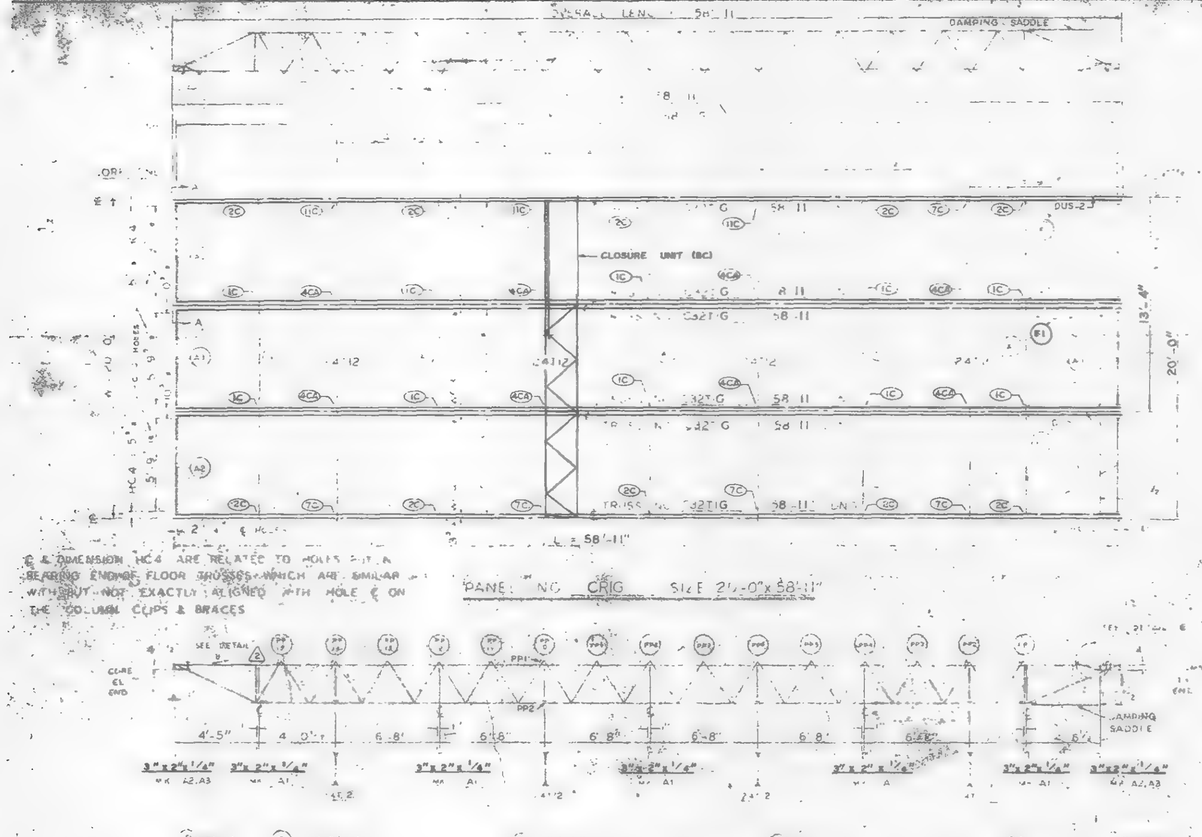
T-AB4 4.31 3-65
T-AB4 5.18.30 7-22-68
T-AB4 41 7-22-68
T-AB4 44 10-11-68
T-AB3 2 1-68
T-AB 7-22-68
T-AB4 § 6.7 7-22-68
T-AB4 42 10-22-68

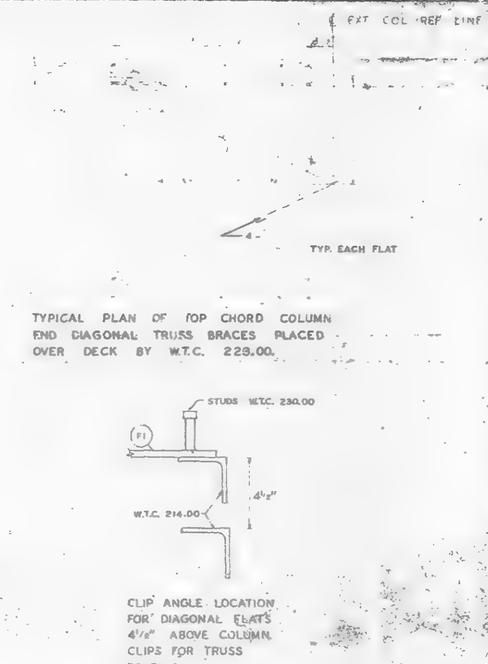
PORT OF NEW YORK AUTHORITY

BLDG A, PIERS 47-48 (S) 47-48, 70-71 (N)
PANEL CRIF 20'-0" x 59'-2"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY PONTA DATE 11/1/68
APPROVED FOR FABRICATION BY ____ DATE ____
DETAILED BY ____ DESIGN DRAWING NO 7-AB3 & 7-22-68 PLATE ____
DRAWN BY ____ DATE OCT 23, 1968
CHECKED BY TN CHURA DATE OCT 23, 1968 CHANGE NO. ____
FABRICATION CONT. NO. ____ SHEET ____ OF ____
PCC 2.21 TP CP





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 228.00.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN. CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL - 2S PANEL				
MATERIAL	MK	PCS	SIZE	REF. DRWG
TOP CHORD TRUSSES	TC	6	CRTIG - 58'-11"	CRTIG
BOTTOM CHORD TRUSSES	BC1	3	24T12 - 19'-11"	8T212
	BC2	3	24T12 - 19'-11"	8T212
	A1	5	3" x 2" x 5/16 x 19'-11"	ST 403
DIAGONAL ANGLE	A2	4	3" x 2" x 1/4 x 5'-11 15/16"	ST 403
	A3	2	3" x 2" x 1/4 x 5'-5"	ST 403
	A4	6	3" x 2" x 5/16 x 5'-5"	ST 102
PATCH PLATES	PP1	18	2'-4" x 1'-0" x 0'-3/8"	ST 400
	PP2	18	3'-4" x 1'-0" x 0'-3/8"	ST 400
FLOOR PLATES	A	3	3" x 2" x 0.135 x 5'-2"	ST 403
	B	6	3" x 2" x 0.135 x 5'-2"	ST 403
	C	3	3" x 2" x 0.135 x 3'-2 3/4"	ST 403
	D	3	3" x 2" x 0.135 x 2'-11"	ST 403
ANGLE CLIPS	C1	24	2" x 2" x 5/16 x 4" x 0'-6"	ST 400
3/8" SHEAR ANCHOR STUDS	SS2	8	3/8" DIA x 4" LONG	ST 400
DAMPING SADDLE	DUS-2	2	3" x 3" x 5/16" x 3 6 7/8"	ST 403
	DUS-1	1	3" x 3" x 5/16" x 3 6 7/8"	ST 403
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3	12 4½" x 12 1½" x 230 x 5'-5½"	8T212 CD204
CONNECTION PLATES	P1	5	3'-6½" x 3'-6" x 0'-0 3/4"	ST 400
	P2	4	4'-1/2" x .30" x 0'-0"	ST 400
	P3	1	4'-1/4" x .38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NO.	DATE	REVISION	BY
2	6-8-68	AS NOTED	G.D.C
1	7-17-68	GENERAL	T.N.

2 REF. DRWG
- A84 3 — 10-15-68
- A84 5 & 6 — 7-22-68
- A84 41 — 7-22-68
- A84 42 — 6-6-68
- A84 8 — 9-9-68
- A84 2 — 7-22-68
- A84 4 & 7 — 7-22-68
- A84 42 — 10-15-68

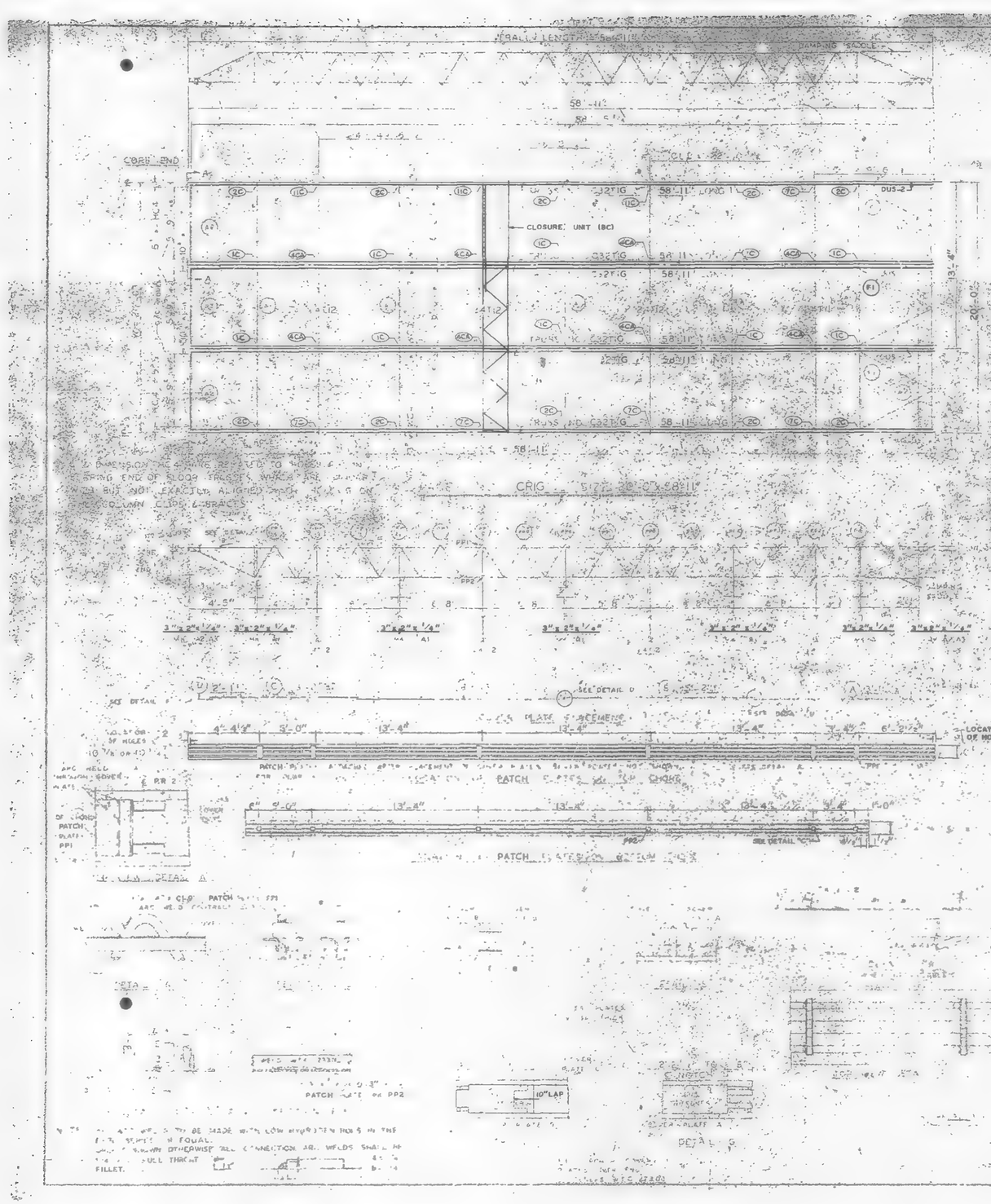
FLOOR PANEL DETAILS
FOR
A.M.D. FRAZE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

39 (NORTH & SOUTH) 40 (SOUTH) 10-1 (NORTH)
PANEL CRIG 58'-11"
BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST) 2

DESIGN BY ACME STEEL COMPANY
DESIGN DRAWING NO 7A83.8 PLATE
DRAWN BY
DATE APRIL 10, 1968
CHECKED BY J.R.PAUL
DATE APRIL 10, 1968
IN CHARGE OF RADO NEW
FABRICATION CONT. NO. 81C
SHEET NO. 2S CRIG

DETAILS OF ALL WELDS

NOTE. ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-IC SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ⅛" FILLET, ⅜" FULL THROAT.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4"x3½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				
MARK				
PATCH PLATE	PP1	18		ST 400
	PP2	16		ST 400
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	3		ST 212
			230 x 6' 0 1/8"	CD 204
CONNECTION PLATES	P1	5	3 1/2" x 9/16" x 0'-8 1/2"	ST 400
	P2	4	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

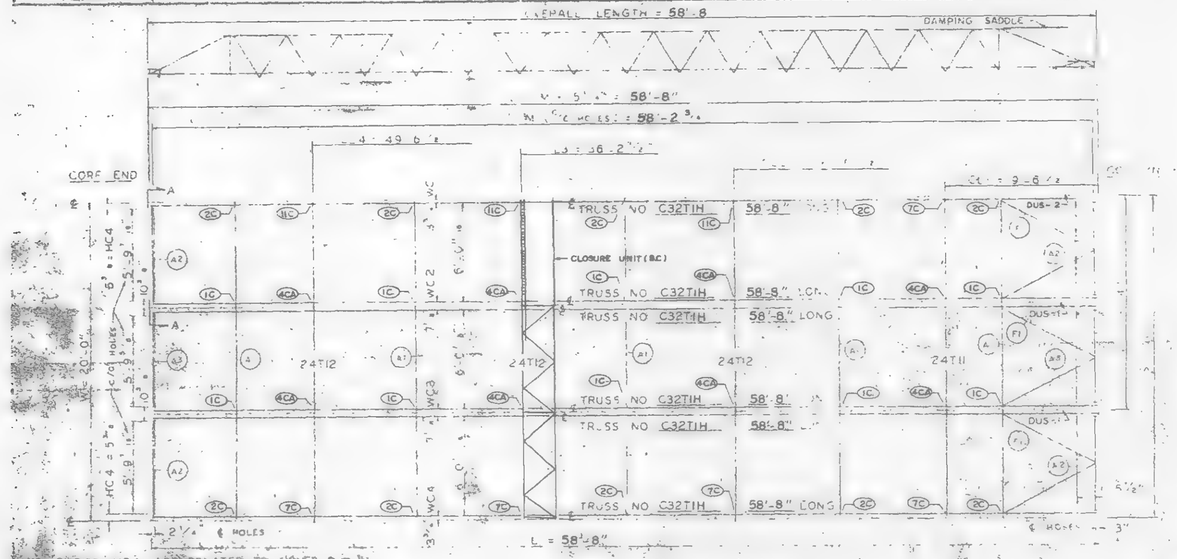
LETTERS AND NUMBERS IN ELLIPSES, IE. (C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202, OR CD 204.

NO.	DATE	REVISION	BY
1	7-17-68	GENERAL	T.M.C.

39 (NORTH & SOUTH) 40 (SOUTH) 41 (NORTH)
CRIG 8'-11"

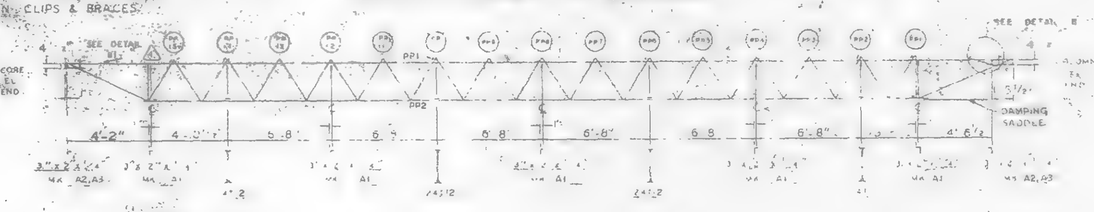
James W. Lee 8/16/68

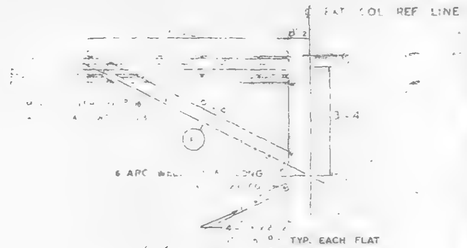
LACLEDE STEEL CO. REV
FOR CRIG



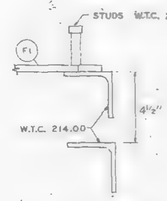
DIMENSION HC4, ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. CB1H SIZE 20'-0" x 58'-8"





DIAGONAL BRACES PLACED



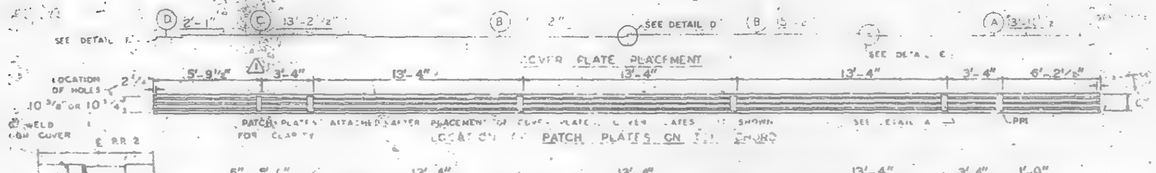
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF. DRWG.
FLOOR TRUSSES	T1H	6	C32TIH - 58'-8"	ST201H
BRIDGING TRUSSES	T11	1	24TI1 - 19'-11"	BT211
	TI2	3	24TI2 - 19'-11"	BT212
3"x2"x1/4" ANGLE	A1	5	3"x2"x3/8"x 10'-11"	ST 403
	A2	4	3"x2"x1/4"x 5'-11 1/4	ST 403
	A3	2	3"x2"x1/4"x 5'-11 1/4	ST 403
DIAGONAL FLATS	F1	6	1 1/2"x 5/8" x 61'8"	ST 402
PATCH PLATES	PP1	18	2"x1/4"x 0'-9"	ST 400
	PP2	18	3"x3/8"x 0'-3"	ST 400
COVER PLATES	A	3	8"x.0135"x 13'-2"	ST 303
	B	6	9"x.0135"x 15'-2"	ST 303
	C	3	10"x.0135"x 13'-2"	ST 303
	D	31	3"x.0135"x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2"x1"x 4 1/4 x 520.6	ST 400
3/4" ø SHEAR ANCHOR	SA2	6	3" REQD. 4'-0"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2"x3 1/2"x 3/8"x3'-8 7/8"	ST 298
	DUS-2	1	3 1/2"x3 1/2"x 3/8"x3'-8 7/8"	ST 298
CONNECTION BAR	CB1	4	1"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2-4x11 1/2"x 1/4"-8	ST 212
			230"x 6'-8 1/2"	CD 204
CONNECTION PLATES	P1	5	3/16" x 8 7/8" x 0'-8 1/8"	ST 300
	P2	4	4 1/2" x .30" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDC

REF DRWG
- 7-AB4-3 10-15-68
- 7-AB4-15,16 & 39 7-22-68
- 7-AB4-41 7-22-68
- 5A-124 1-69
- 7-AB3-2 1-3-68
- 7-AB1-2 7-22-68
- 7-AB2-6 & 7 7-22-68
- 7-AB4-42 10-15-68



ALL ARC WELDS TO BE MADE WITH LOW-HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.

1	6-9-69	AS NOTED
NO.	DATE	REVISION

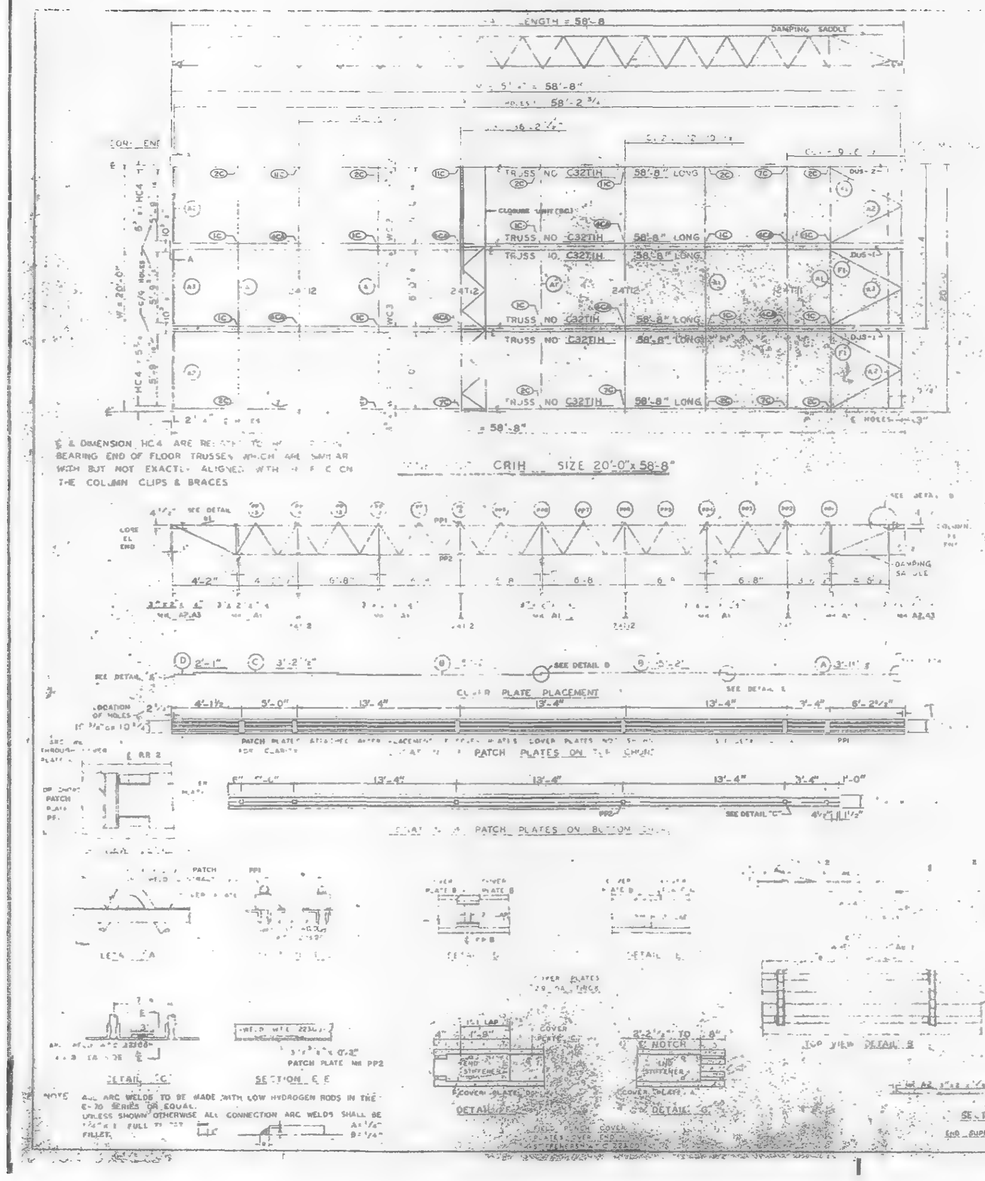
SHOP PANEL DETAILS
FOR
WORLD TRADE CENTER, N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 79-80 (EAST)
BLDG. B FLOORS 79-80 (WEST) 1

PANEL CB1H

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-8
APPROVED FOR FABRICATION BY	DATE 11/2/76	DRAWN BY DATE OCT. 23, 1968
APPROVED FOR FABRICATION BY	DATE	CHECKED BY DATE OCT. 23, 1968
DETAILED BY		FABRICATION CONT. NO. 22


LENGTH = 58'-8
DAMPING SADDLE
W = 5'-0" x 58'-8"
58'-2 3/4
TRUSS NO C32TIH 58'-8" LONG
CLOSURE UNIT (BC)
24TI2
HC4
HC3
58'-8"
CRIH SIZE 20'-0" x 58'-8"
SEE DETAIL "B"
SEE DETAIL "C"
SEE DETAIL "D"
SEE DETAIL "E"
CLOSE EL END
DAMPING SADDLE
4'-2"
6'-8"
6'-6"
6'-0"
PP1
PP2
PP3
PP4
PP5
PP6
PP7
PP8
PP9
PP10
PP11
PP12
PP13
PP14
PP15
PP16
PP17
PP18
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PP20
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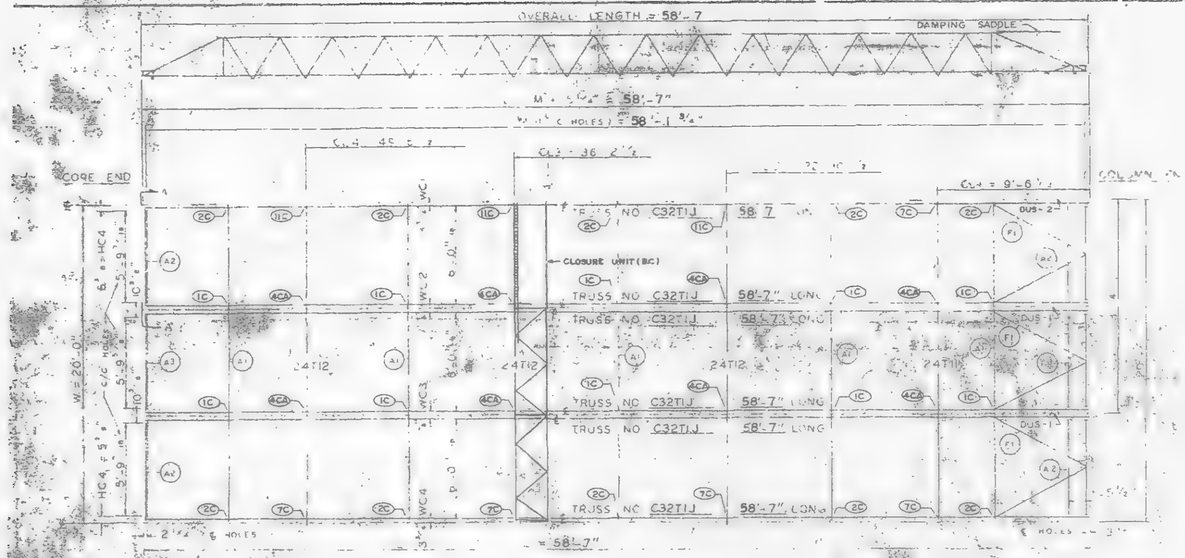
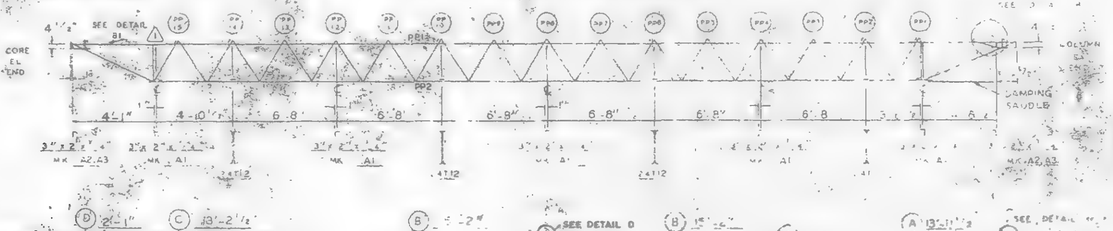
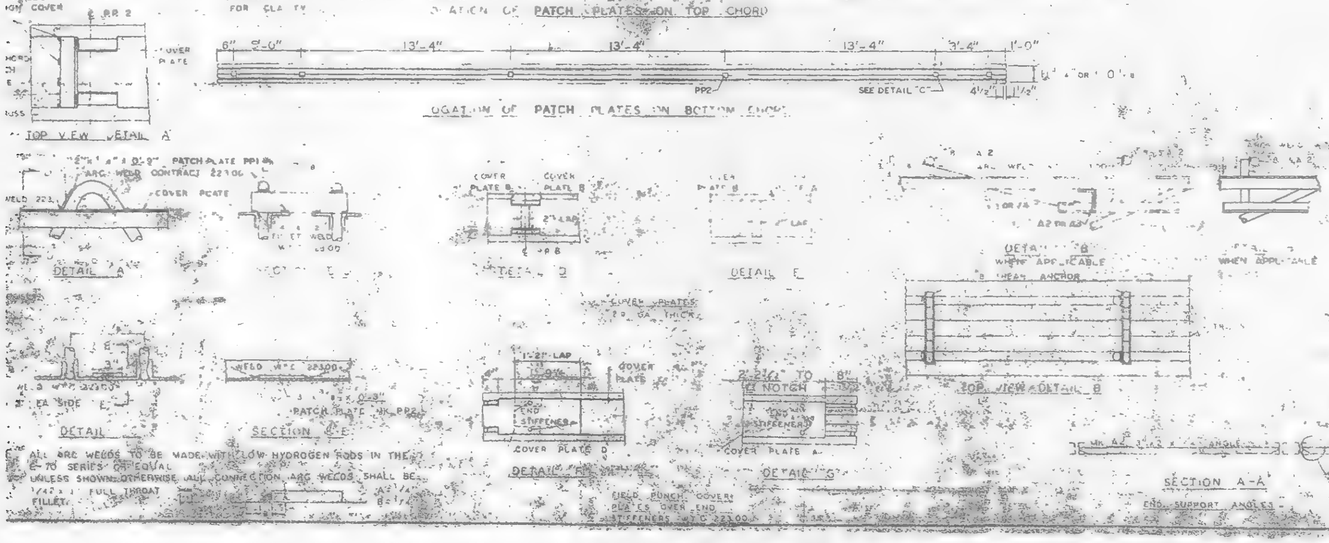
PP31
PP32
PP33
PP34
PP35
PP36
PP37
PP38
PP39
PP40



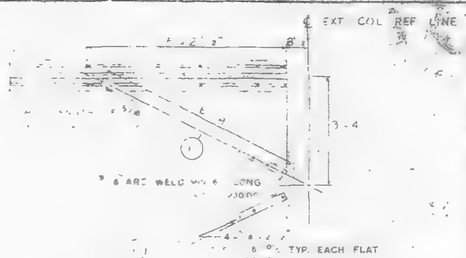
DIMENSION HC4 ARE RELATED TO HOLES PUNCHED IN BARING END OF FLOOR TRUSSES WHICH ARE SIMILAR THERETO BUT NOT EXACTLY ALIGNED WITH HOLES IN COLUMN CLIPS & BRACES

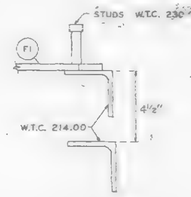
PANEL NO CRIJ SIZE 20'-0" x 58'-7"





ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE FULL THROAT FILLET.





CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
DESCRIPTION OF MATERIAL	MK	REQ'D	SIZE	REF. DWG.
FLOOR TRUSSES	T1J	6	C32TIJ - 58'-7"	ST 403
BRIDGING TRUSSES	T11	1	24T11 - 19'-11"	BT212
	T12	3	24T12 - 19'-11"	BT212
3"x2"x¼" ANGLE	A1	5	3"x2"x¼"x 5'-11"	ST 403
	A2	4	3"x2"x¼"x 5'-11¾"	ST 403
	A3	2	3"x2"x¼"x 5'-11¾"	ST 403
DIAGONAL FLATS	F1	6	1"x 5"/8 x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x"/8"x 3'-8"	ST 400
	PP2	18	3"x 5"/8"x 0'-3"	ST 400
COVER PLATES	A	1	5"x.0135"x12'-11"	ST 301
	B	6	9"x.0135"x15'-2½"	ST 301
	C	3	9"x.0135"x12'-2½"	ST 301
	D	3	9"x.0135"x 2'-1"	ST 301
ANGLE CLIPS	C1	4	2½"x1½"x¼"x 0'-6"	ST 400
⅝ SHEAR ANCHOR	SA3	9	⅝ REBAR x 0'-6"	ST 400
DAMPING SADDLE	DUS-2	2	3½"x3"x 5/16"x3'-6"	ST 400
	DUS-1	1	3½"x3"x 5/16"x5'-5"	ST 400
CONNECTION BAR	CB1	4	1"x1"x3'-3"	ST 400
CLOSURE UNIT	BC1	3	2"x(1½"x1¼"x¼" x 230" x 6'-8½"	BT612
CONNECTION PLATES	P1	5	3½"x 5"/8"x 0'-8½"	ST 400
	P2	4	4½"x .38"x 0'-9"	ST 400
	P3	1	4½"x .38"x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

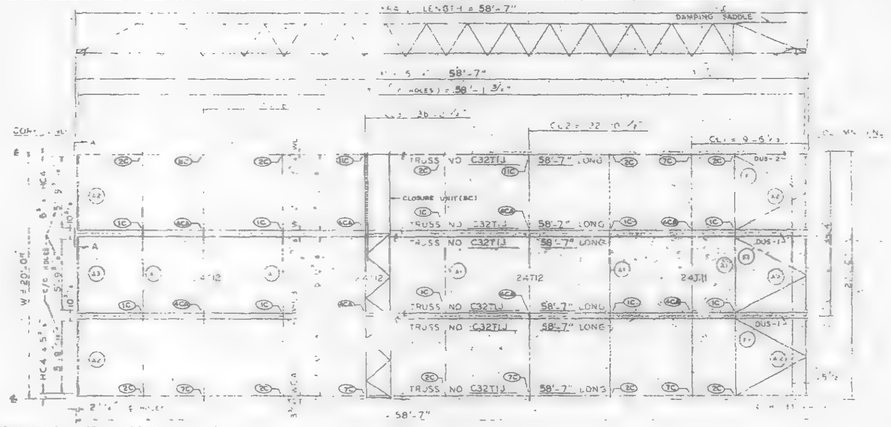
NO.	DATE	REVISION	BY
1	8-9-68	AS NOTED	GDC

REF DWGS
1 AB4-3 10-15-68
2 AB4-15,16 & 33 7-22-68
7 AB4-41 7-22-68
SF-124 6-68
7-AB4-2 1-3-68
7 AB4-2 1-3-68
7 AB4-6 & 7 7-22-68
7-AB4-42 10-15-68

FOR PANEL DETAILS
WORLD TRADE CENTER
FOR
THE PORT OF NEW YORK AUTHORITY

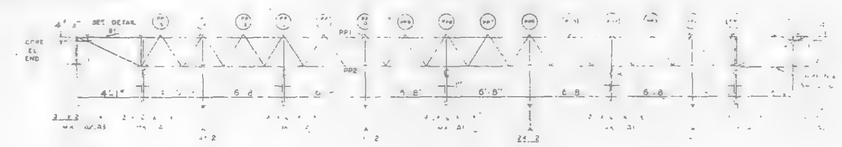
BLDG. A FLOORS 40 (N)
PANEL CRIJ - 2 - 7"
BLDG. B FLOORS 40 (WEST) 1

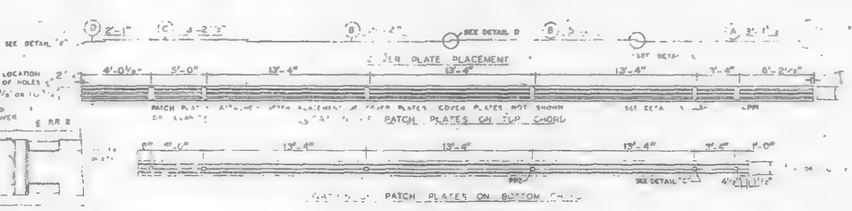
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-01 PLATE
APPROVED FOR FABRICATION FOR PONYA DATE 11/12/68
APPROVED FOR FABRICATION BY DATE
DRAWN BY DATE OCT 23 1968
CHECKED BY DATE OCT 23
DETAILED BY DATE FABRICATED BY DATE

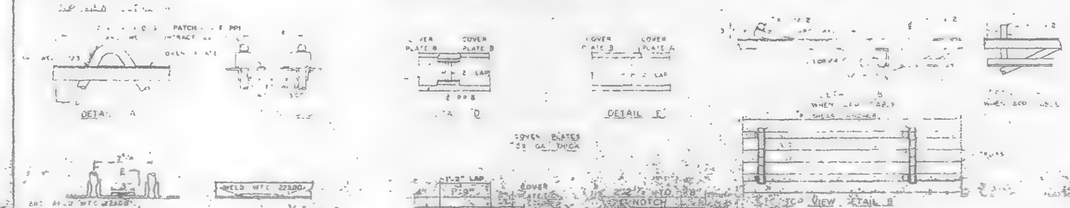


℄ DIMENSION HC4 ARE RELATED TO HOLES IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES IN THE COLUMN CLIPS & BRACES

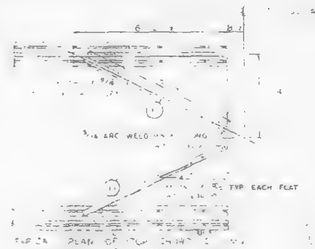
CBIK SIZE 20'-0"x58'-7"







NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE FILLET



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REMARKS
FLOOR TRUSSES	TJ	5	24TJ - 58'-7"	ST270
	T12	1	24T12 - 19'-11"	ST212
	T12	3	24T12 - 19'-11"	ST212
ANGLE	A1	5	3 x 3 x 5/16 x 10'-11"	ST 403
	A2	4	3 x 3 x 5/16 x 5'-5"	ST 403
	A3	2	3 x 3 x 5/16 x 5'-5"	ST 403
DIAGONAL FLATS	F	4	3 x 1/4 x 4'-4"	ST 402
PATCH PLATES	PP1	16	2 x 1/4 x 1'-0"	ST 400
	PP2	12	6" x 3/8" x 2'-0"	ST 400
COVER PLATES	A	3	12 x 1/4 x 5'-3"	ST 400
	B	6	6 x 3/16 x 5'-3"	ST 400
	C	3	6 x 3/16 x 2'-3"	ST 400
	D	3	6 x 3/16 x 2'-3"	ST 400
ANGLE CLIPS	C	48	3 x 3 x 5/16 x 0'-8"	ST 400
¾ Ø SHEAR ANCHOR STUDS	SA2T	9	¾ Ø STUD x 1'-0"	ST 400
DAMPING SADDLE	DPM	2	4 x 3/8 x 3'-8" x 5'-8"	ST 296
	DUS	2	3 x 3/8 x 3'-8" x 5'-8"	ST 298
CONNECTION BAR	CBI	4	1 x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2'-4½" x 1'-1½" x 230 x 5'-6⅝"	BE212 CD204
CONNECTION PLATES	P1	5	3/16" x 8" x 0'-8"	ST 400
	P2	4	1/4" x 30" x 0'-9"	ST 400
	P3	1	1/4" x 38" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES i.e. (C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

	1-3-68
SHT 5,15,539	7-22-68
	7-22-68
	10-11-68
	1-31-68
	7-22-68
	7-22-68
	10-22-68

BUILDING (S) 40 (N)

PANEL CBIJ 20'-0" x 58'-7"

FABRICATION BY ACME STEEL COMPANY

FROM CHICAGO AT MADISON & ILLINOIS

APPROVED FOR FABRICATION BY [illegible] FOR PCMTA DATE 11/1/68

APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE

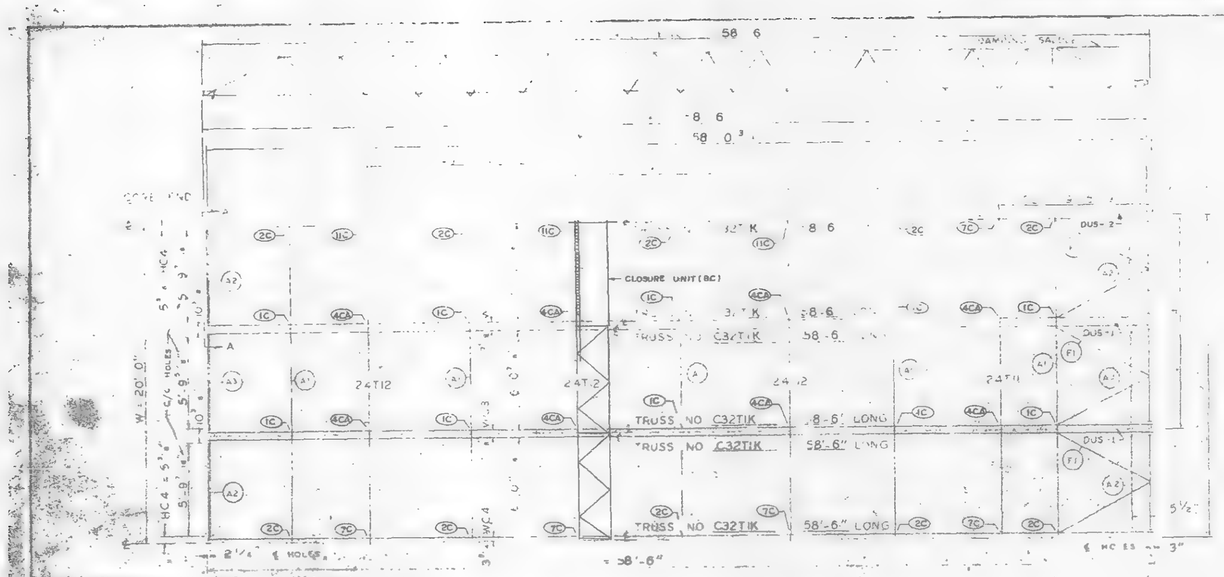
DETAILED BY [illegible] C.C. WEBER

DESIGN DRAWING NO. T-ABS-B - 7-22-68 PLATE

DRAWN BY [illegible] DATE OCT 23, 1968

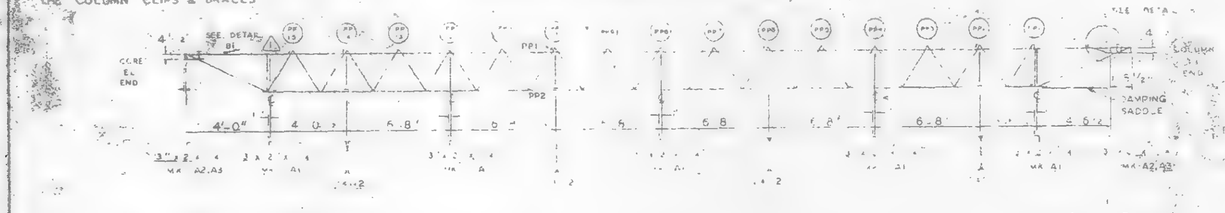
CHECKED BY [illegible] DATE OCT 23, 1968

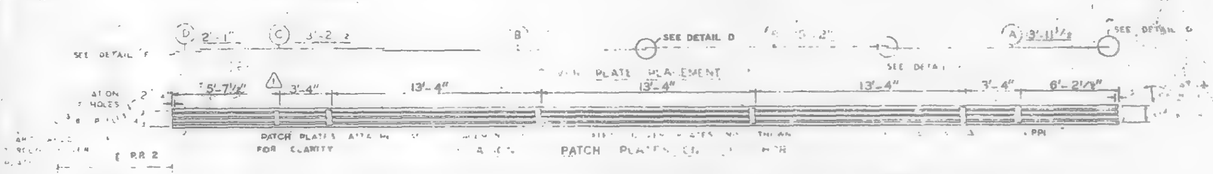
FABRICATION CONT NO. A.T.C. 22F SHEET NO.

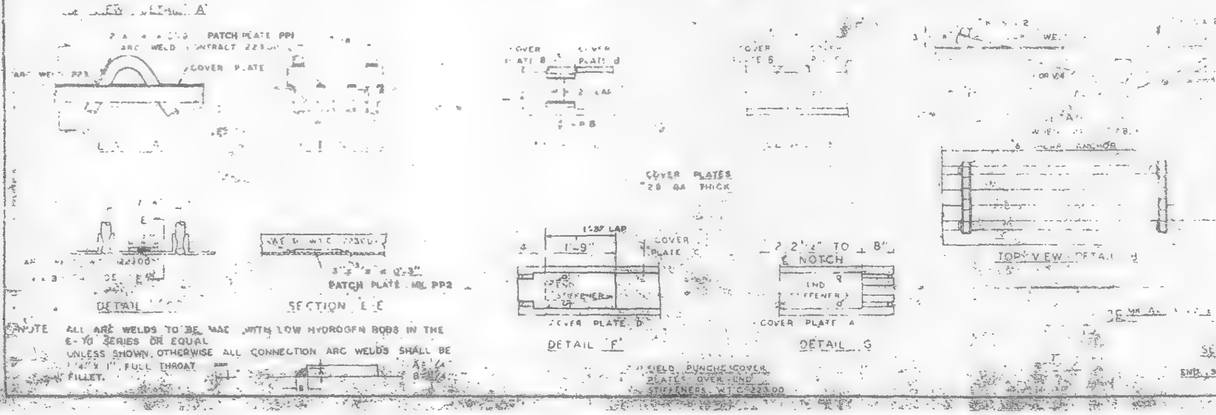


℄ & DIMENSION HC4 ARE RELATED TO HOLES IN TOP OF BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL CR1K 5'-7" F 20'-0 x 58'-6"







NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL EACH PANEL				
MARK		QTY.	SIZE	SPEC.
	K	1	12T1K 58-6	C 1K
	T12	1	24T12 x 1	U1Z1C
ANGLE	A1	5	3"x2 1/2"x 1/4" x 19'-11"	ST 403
	A2	4	3"x2 1/2" x 1/4" x 5'-10"	ST 403
	A3	2	3"x2 1/2" x 1/4" x 5'-11 1/4"	ST 403
DIAGONAL	F1	6	1 1/2"x 3/8" x 5'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4" x 0'-8"	ST 403
	PP2	18	3"x 3/8" x 0'-3"	ST 410
COVER PLATES	A	3	9"x.0135"x13'-11 1/2"	ST 303
	B	6	9"x.0135"x 15'-2 1/4"	ST 303
	C	3	9"x.0135"x 3'-2 1/2"	ST 303
	D	3	9"x.0135"x 2'-1"	ST 303
ANGLE CLIPS	C1	21	2"x1 1/2"x 1/4"x 0'-6"	ST 400
7/8" SHEAR ANCHOR	SA21	9	7/8" STUD x 5'-0"	ST 400
DAMPING SADDLE	DUS1	6	3 1/2"x3 1/8"x 2 3/4"x 3'-6 7/8"	ST 298
	DUS-2	1	3 1/2"x3 5/8"x 3/4"x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	6	1"x 6"-4"	ST 500
CLOSURE UNIT	BC	3	2"x 1 1/2"x 1/4"x 230 x 6'-8 1/2"	ST 312 C 0204
CONNECTION PLATES	P1	5	3 1/2"x 8"-6" x 0'-8 1/2"	ST 401
	P2	4	4 1/2" x .390" x 0'-8"	ST 400
	P3	1	4 1/2" x .390" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

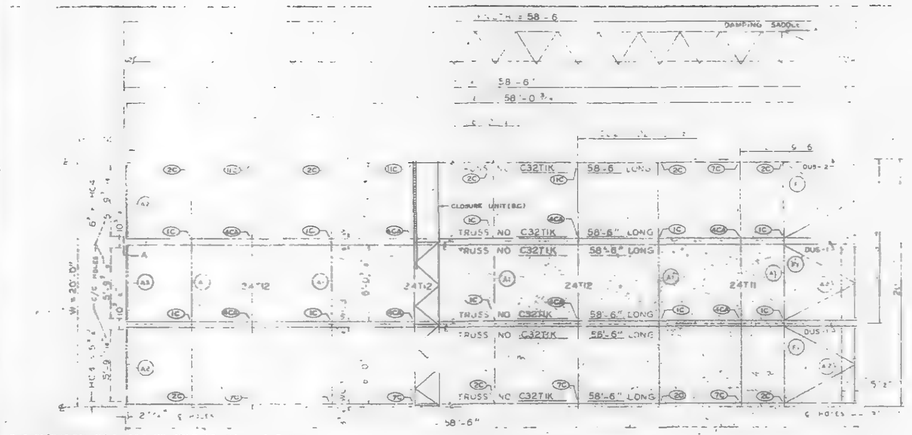
NO.	DATE	REVISION
1	6-9-69	AS NOTED

1	10-69	ADD 5,16 & 39
2	12-69	ADD 41
3	1-69	ADD -2
4	3-69	ADD 2
5	1-22-69	ADD 47
6	1-22-69	ADD 42
7	3-69	

FLOOR PANEL DETAILS
FOR
AIRPORT TERMINAL CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

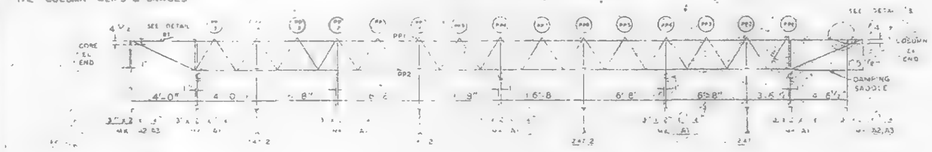
BUILDING NO. 45,46 (S), 46(N)
PANEL CR1K 58'-6"
BLDG. B FLOORS 45 (EAST) 46 (EAST & WEST)

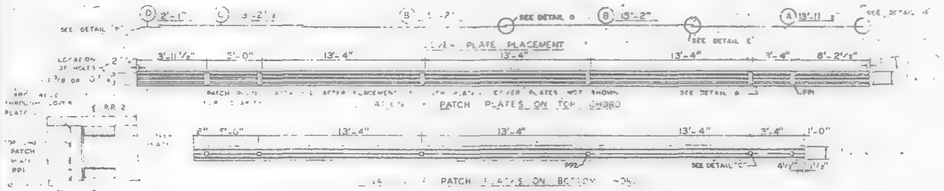
FABRICATED BY LADLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 1-2889-B
APPROVED FOR FABRICATION BY ... FOR PORT N.Y.A. DATE 4/14/69
DRAWN BY ... DATE OCT. 68
APPROVED FOR FABRICATION BY ... FOR FABRICATOR DATE ...
CHECKED BY ... DATE OCT. 68
DETAILED BY ...

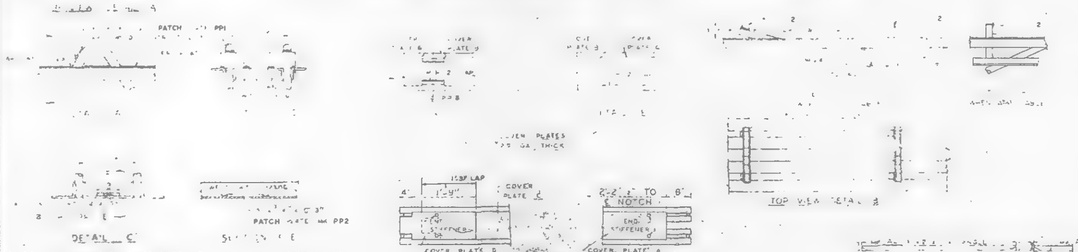


℄ & DIMENSION HC4 ARE RELATED TO NOMINAL EDGE OF BEARING END OF FLOOR TRUSSES WHICH ARE SQUARE WITH BUT NOT EXACTLY ALIGNED WITH THE COLUMN CLIPS & BRACES.

ERECTION DIAGRAM — CRIK SIZE 20'-0" x 58'-6"

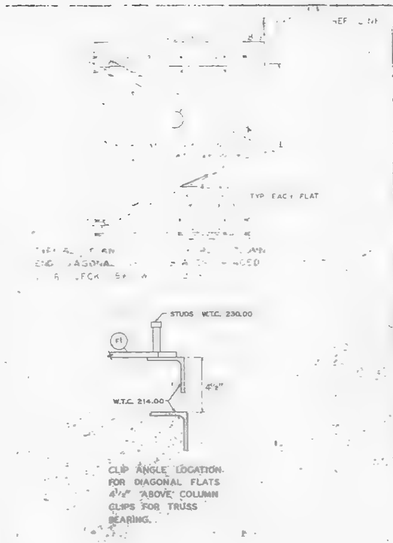






ALL WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE 70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ANGLE WELDS SHALL BE 5/16" FILLET.

FIELD PUNCH COVER PLATES OVER END STIFFENERS W = 222.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MATERIAL				REV. DRWG
	K	CRIK	58'-6	CRIK
				ST 212
ANGLE	A1	5	L 3 x 2 x 1/4 x 1'-9"	ST 403
	A2	6	L 3 x 2 x 1/4 x 3'-11 1/2"	ST 403
	A3	2	L 3" x 2" x 1/4 x 3'-11 1/2"	ST 403
DIAGONAL FLATS	W	4	1/2" x 3" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2'-4" x 1'-4" x 0'-3"	ST 400
	PP2	18	3" x 1'-8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x 0.135" x 13'-2"	ST 403
	B	6	9" x 0.135" x 15'-2"	ST 403
	C	3	8" x 0.135" x 13'-2"	ST 403
	D	3	2" x 0.135" x 2'-1"	ST 323
ANGLE CLIPS	C1	21	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
7/8" ø SHEAR ANCHOR	SA2	9	7/8" ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS1	2	3 1/2" x 3 1/2" x 3/16" x 3'-8 7/16"	ST 205
	DUS 2	1	3" x 3 1/2" x 3/16" x 3'-8 7/16"	ST 205
CONNECTION BAR	CB1	4	1" x 1'-3"	ST. 400
CLOSURE UNIT	BC	3	2 at 1 1/2" x 1 1/4" x 230 x 6'-6 1/2"	ST 212 CD 204
CONNECTION PLATES	P1	5	3 1/2" x 2 1/2" x 0'-6 1/2"	ST 400
	P2	4	6 1/2" x .390" x 0'-9"	ST 400
	P3	1	6 1/2" x .390" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

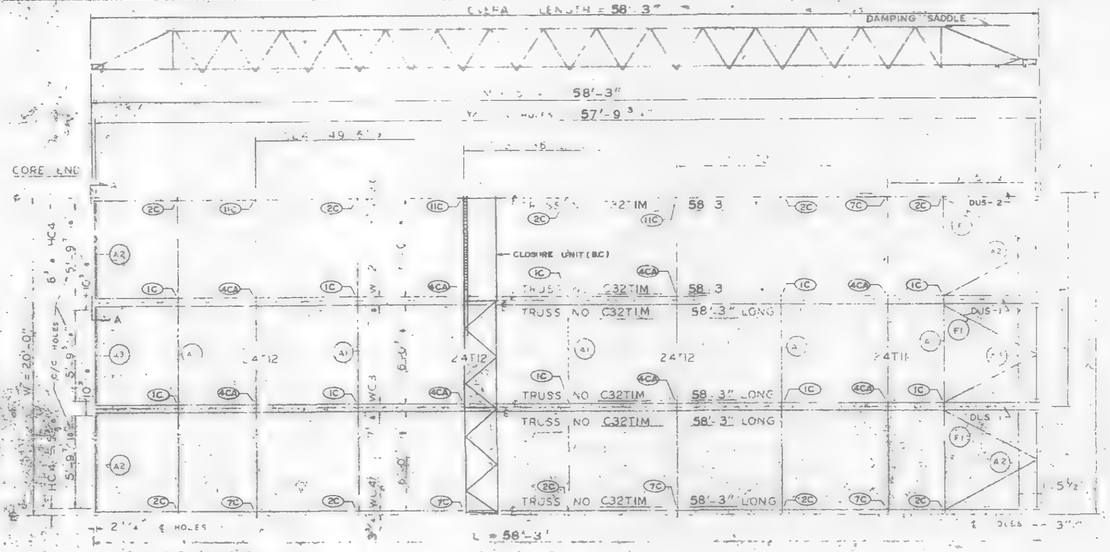
	7-22-68
	7-22-68
	10-11-68
	7-22-68
	7-22-68
GBA 42	10-22-68

45-46 (S) 46(N)

CRIK 58'-6"

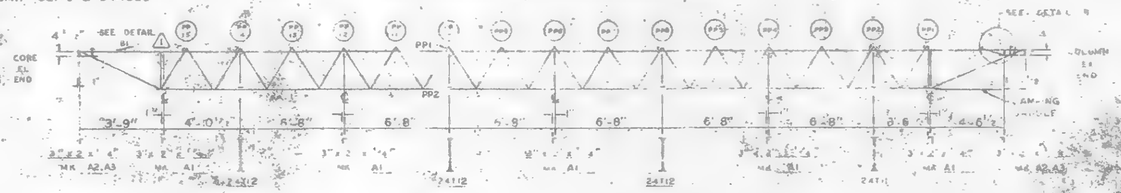
FABRICATION BY LACLEDE STEEL COMPANY
AT MADISON, ILLINOIS

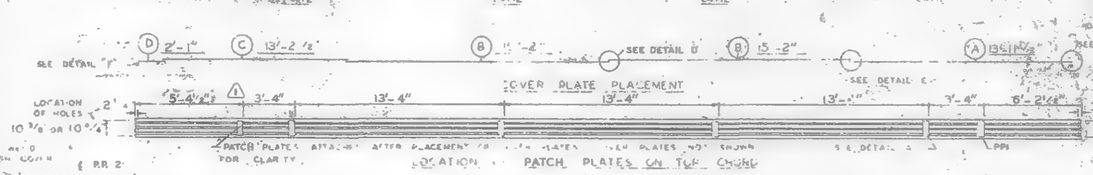
APPROVED FOR FABRICATION	DATE 11/18/68	ESIGN DRAWING NO. 7 A93 B 7-22-68	PLATE
APPROVED FOR FABRICATION	DATE	DRAWN BY T.A. DATE OCT 23, 1968	
		CHECKED BY TW CH BA DATE OCT 23, 1968	IN CHARGE OF PROD. DEV.
DETAILED		FABRICATION CONT NO. #T.C 221	SHEET NO. F8CRI

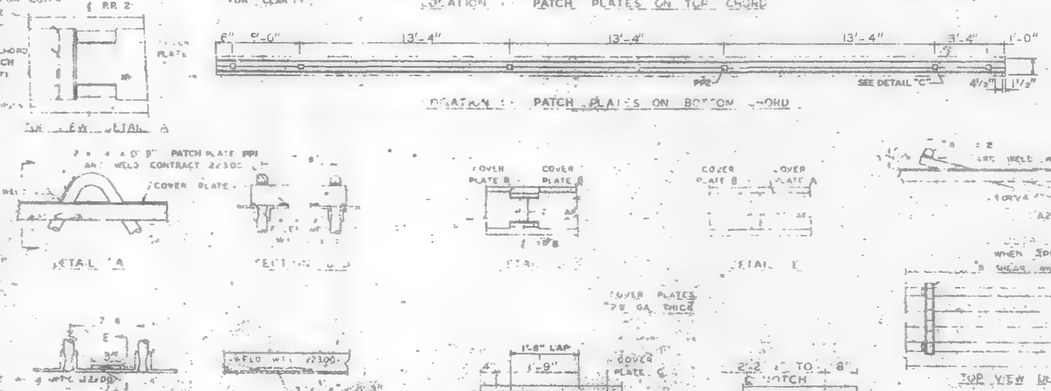


C & DIMENSION HC4 ARE RELATED TO HOLES OUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. C81M SIZE 20'-0" x 58'-3"

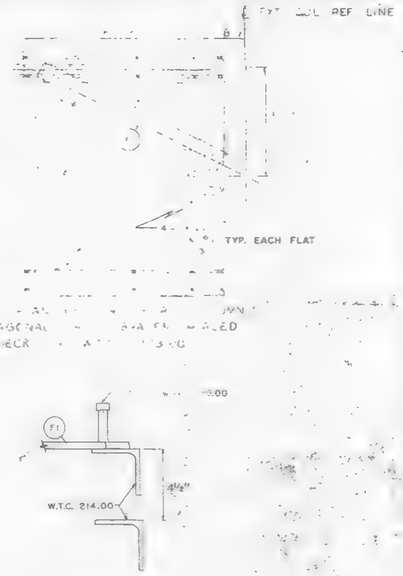






NOTE: ALL ARC WELDS TO BE MADE WITH C.W. HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE ¼" ℇ FULL THROAT FILLET.

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 12300



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1M	6	C32T1M - 58'-3"	ST201M
BRIDGING TRUSSES	L	1	24T12 - 19'-11"	BT211
	T12	3	24T12 - 19'-11"	BT212
3"x3"x¼" ANGLE	A1	5	3"x2"x¼"x 19'-11"	ST 403
	A2	4	3"x2"x¼"x 5'-11⅛"	ST 403
		2	3"x2"x¼"x 5'-11¾"	ST 403
DIAGONAL FLATS	F1	6	1'-6"x 4"x⅜"x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x¼"x 1'-9"	ST 400
	PP2	18	3"x¼"x 1'-3"	ST 400
COVER PLATES	A	3	9"x.0135"x 19'-2"	ST 303
	B	6	9"x.0135"x 15'-2"	ST 303
	C	3	9"x.0135"x 13'-3½"	ST 303
	D	3	9"x.0135"x 2'-1"	ST 303
ANGLE CLIPS	CL	21	2"x1½"x¼"x0'-6"	ST 400
⅞ ϕ SHEAR ANCHOR	SA2	9	⅞ ϕ REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3½"x3½"x⅜"x 19'-8⅜"	ST 279
	DUS-2	1	3½"x3½"x⅜"x 31'-8⅜"	ST 258
CONNECTION BAR	CBI	4	1"x 1'-3"	ST 400
CLOSURE UNIT	BC	3	2"x1⅛"x1¼"x	BT 212
			230 x 6'-6½"	CD 204
CONNECTION PLATES	P1	5	3½"x ⅜"x 0'-6½"	ST 400
	P2	4	4½"x .38"x 0'-9"	ST 400
	P3	1	4½"x .38"x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES ie (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GD

REF. DRWG.	
AB4 3	10-15-68
AB4 15,16 & 39	7-22-68
AB4 41	7-22-68
SA 124	1-6-69
AB3 2	1-3-68
AB1 2	7-22-68
AB2 6 & 7	7-22-68
AB4 42	10-15-68

CORE PANEL DETAILS

WORLD TRADE CENTER - N.Y.C.

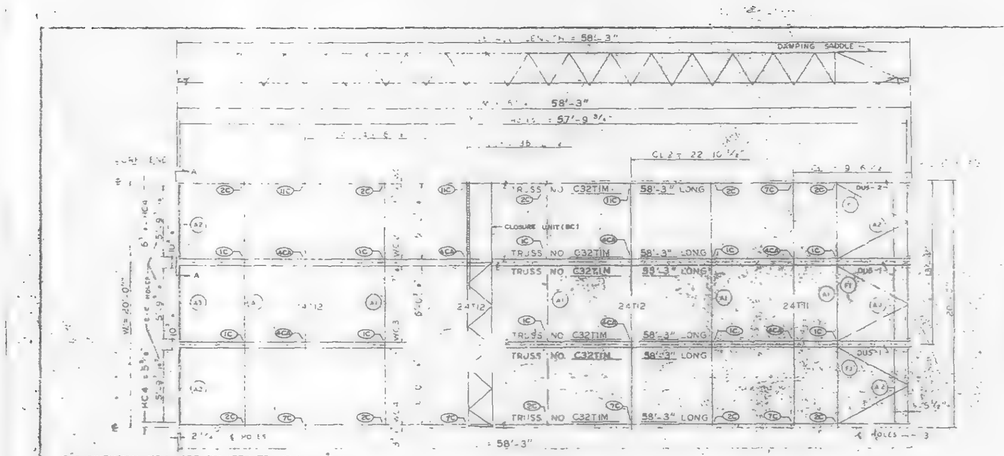
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLRS. 72-73 (N.)

PANEL C81M 20'-0" x 58'-3"

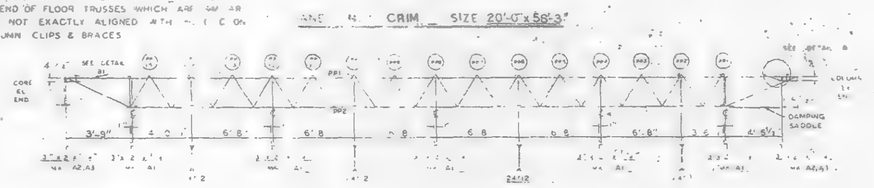
BLDG. B FLOORS 72-73 (WEST)

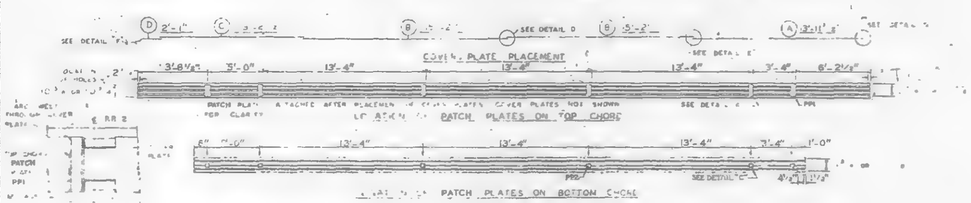
FABRICATED BY: AMERICAN BRIDGE DIVISION OF U.S. STEEL CORP.		DESIGN DRAWING NO. 7-AB3-B2	PLATE
APPROVED FOR FABRICATION BY: [illegible]	DATE: 12/12/68	DRAWN BY: [illegible] DATE: OCT. 23 1968	
APPROVED FOR FABRICATION BY: [illegible]	DATE:	CHECKED BY: T.M. CHOR DATE: OCT. 23 1968	
DETAILED BY: [illegible]		FABRICATION W.T.C.	

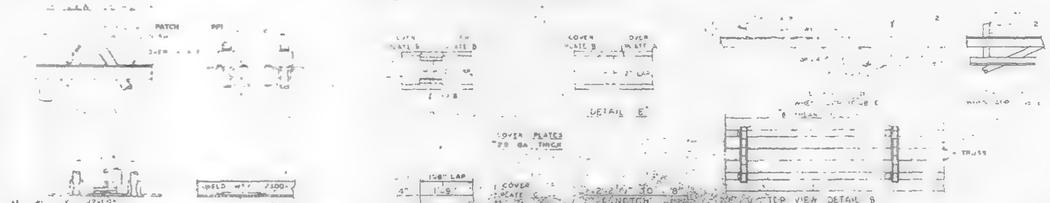


6" & DIMENSION MC4 ARE RELATED TO MC4 AT THE BEARING END OF FLOOR TRUSSES WHICH ARE SQUARE WITH BUT NOT EXACTLY ALIGNED WITH THE COLUMN CLIPS & BRACES

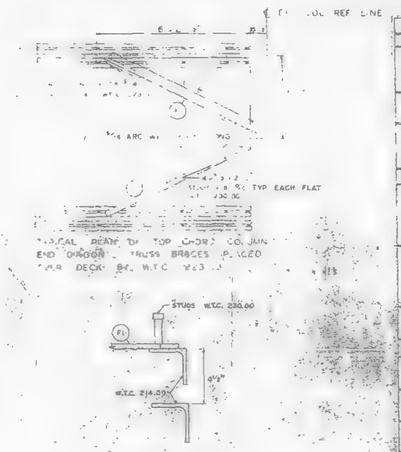
LINE N CRIM SIZE 20'-0" x 58'-3"







NOTE ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR UNLESS SHOWN OTHERWISE. ALL CONNECTION ARC WELDS SHALL BE 1/4" FILLET.



REQUIRED MATERIAL PER PANEL				REF DWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	TIM	6	C32T1M - 58'-3"	ST201M
BRIDGING	T1	1	24T11 - 9'-11"	ST212
	T2	3	24T12 - 9'-11"	ST212
3 x 3 x 1/4 ANGLE	A1	5	3 x 2"# x 4'-x 19'-11"	ST 403
	A2	4	3 x 2"# x x 5'-11 1/8"	ST 403
	A3	2	3 x 2"# x 5'-11 1/8"	ST 403
DIAGONAL FLATS	F1	5	2" x 6" x 8'-6"	ST 402
PATCH PLATES	PP1	18	2 x 8" x 0'-8"	ST 400
	PP2	18	2 x 8" x 3'-4"	ST 400
COVER PLATES	A	3	2 x 6" x 10'-1"	ST 400
	B	5	2 x 6" x 8'-2"	ST 400
	C	2	2 x 6" x 8'-8"	ST 400
	D	8	2" x 6" x 3'-3"	ST 400
ANGLE CLIPS	C1	12	2" x 4" x 3 1/2" x 0'-6"	ST 400
5/8" SHEAR STUD		0	5/8" Ø x 5'-0"	ST 400
DAMPING SADDLE	DS	2	3" x 3 1/2" x 3/8" x 3'-8"	ST 200
	DUS-2	1	3" x 3 1/2" x 3/8" x 5'-8"	ST 200
CONNECTION BAR	CB	4	1" x 1'-3"	ST 400
CLOSURE UNIT	BC	8	2 @ 1 1/2" x 1 1/2" x 5/16" x 230 x 6'-4 1/4"	ST 212 CD 206
CONNECTION PLATES	P1	5	3/16" x 7" x 0'-8 1/2"	ST 400
	P2	6	3/16" x .375" x 0'-8"	ST 400
	P3	1	3/16" x .375" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

BID SET 72-73 (N)

PART CRIM 2 @ 58'-3"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-455 B 7-22-68 PLATE

APPROVED FOR FABRICATION BY [signature] DATE 7/11/68 FOR PONTA

DRAWN BY [illegible] DATE OCT. 23, 1968

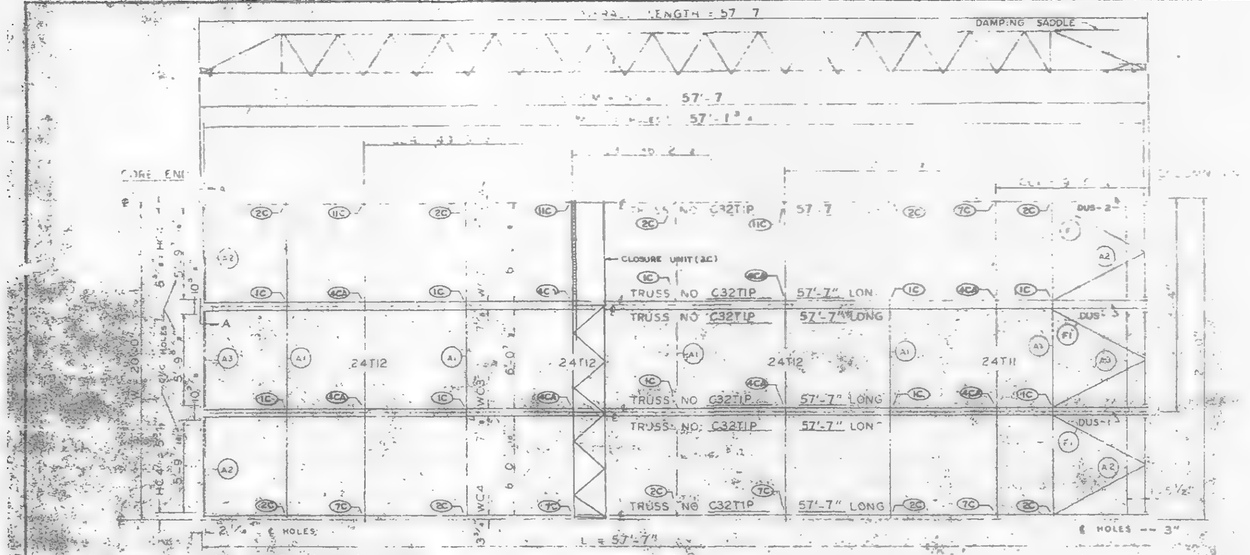
APPROVED FOR FABRICATION BY _____ DATE _____ FOR FABRICATOR

CHECKED BY [illegible] DATE OCT. 23, 1968

DETAILED BY A.C. HEBERT

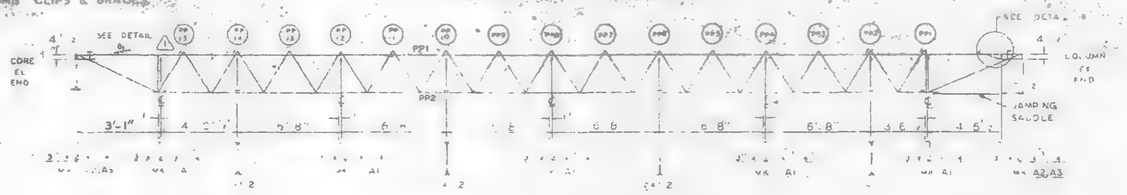
FABRICATION CONT. NO. W.T.C. 221

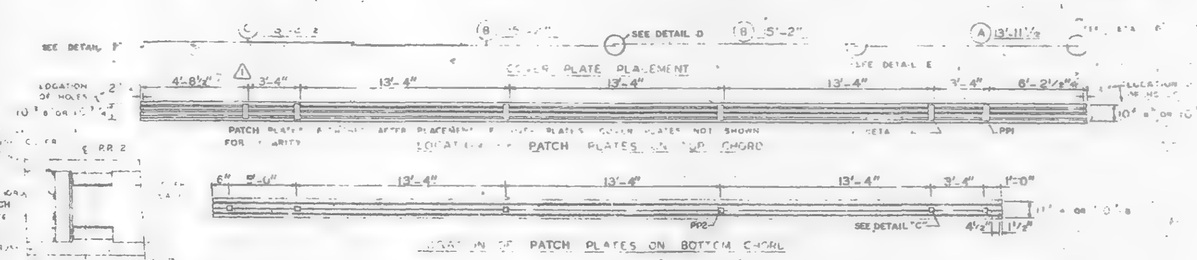
SHEET NO. FP CF

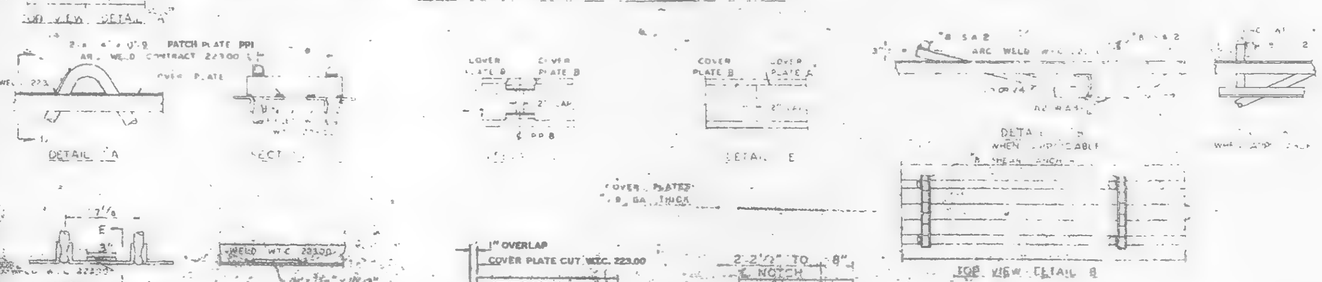


C & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES C ON THE COLUMN CLIPS & BRACES.

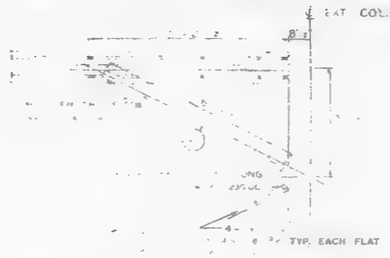
PANEL NO. CB1P SIZE 20'-0" x 57'-7"



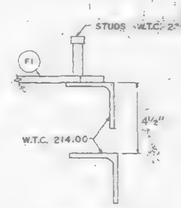




NOTE: ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
UNLESS SHOWN OTHERWISE ALL CONNECTION ARC WELDS SHALL BE 5/16" MIN. FULL THROAT FILLETS.



TYPICAL PLAN OF TYP. CHORD - COLUMN END DIAGONAL FLATS BRACES PLACED OVER DECK B+ W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	SHOP DRWG
FLOOR TRUSSES	TYP	6	C32T1P - 57'-7"	T2C1F
		1	24T11 - 19'-11"	B1F1
		1	24T12 - 19'-11"	B1F2
ANGLES	A1	5	3" x 2" x 5/16" x 19'-11"	ST 403
	A2	4	3" x 2" x 5/16" x 5'-11 15/16"	ST 403
	A3	2	3" x 2" x 5/16" x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F	6	1½" x 5/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 5/16" x 0'-3"	ST 400
COVER PLATES	A	3	9" x 0.135" x 13'-1½"	ST 303
	B	6	9" x 0.135" x 13'-2"	ST 303
	C	3	9" x 0.135" x 13'-2½"	ST 303
ANGLE CLIPS	C1	21	2½" x 2½" x 5/16" x 10'-6"	ST 410
¾" ℄ SHEAR ANCHOR	SA2	6	¾" ℄ SHEAR STUDS	STUD 2
DAMPING SADDLE	DUS-1	2	3½" x 3½" x 5/16" x 3'-8"	ST 303
	DUS-2	1	3½" x 3½" x 5/16" x 3'-8"	ST 303
CONNECTION BAR	CB1	4	1" x 1" x 2'-3"	S1 400
CLOSURE UNIT	BC	3	2 x L1½" x 1½" x 5/16" x 2'-3"	ST 212
			230 x 6'-9½"	T 0201
CONNECTION PLATES	P1	15	3½" x 3½" x ½" x 0'-8½"	ST 400
	P2	4	4½" x .30" x 0'-9"	ST 400
	P3	1	4½" x .30" x 1'-0"	ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION
1	6-9-69	AS NOTED

1 PER DWG. 1 AB
1 AB
1 A1
2 A
2 A1
2 A3
2 B
1 BC
2 B4 1

FOR PANEL DETAILS

ACRES TRAIN CENTER - N.Y.C.

PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 74 (WEST) 1

PANEL CRIP 57'-7"

FABRICATION BY LACLEDE STEEL COMPANY.

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-B

APPROVED FOR FABRICATION PORT AUTHORITY OF NY & NJ — DATE 1/2/70

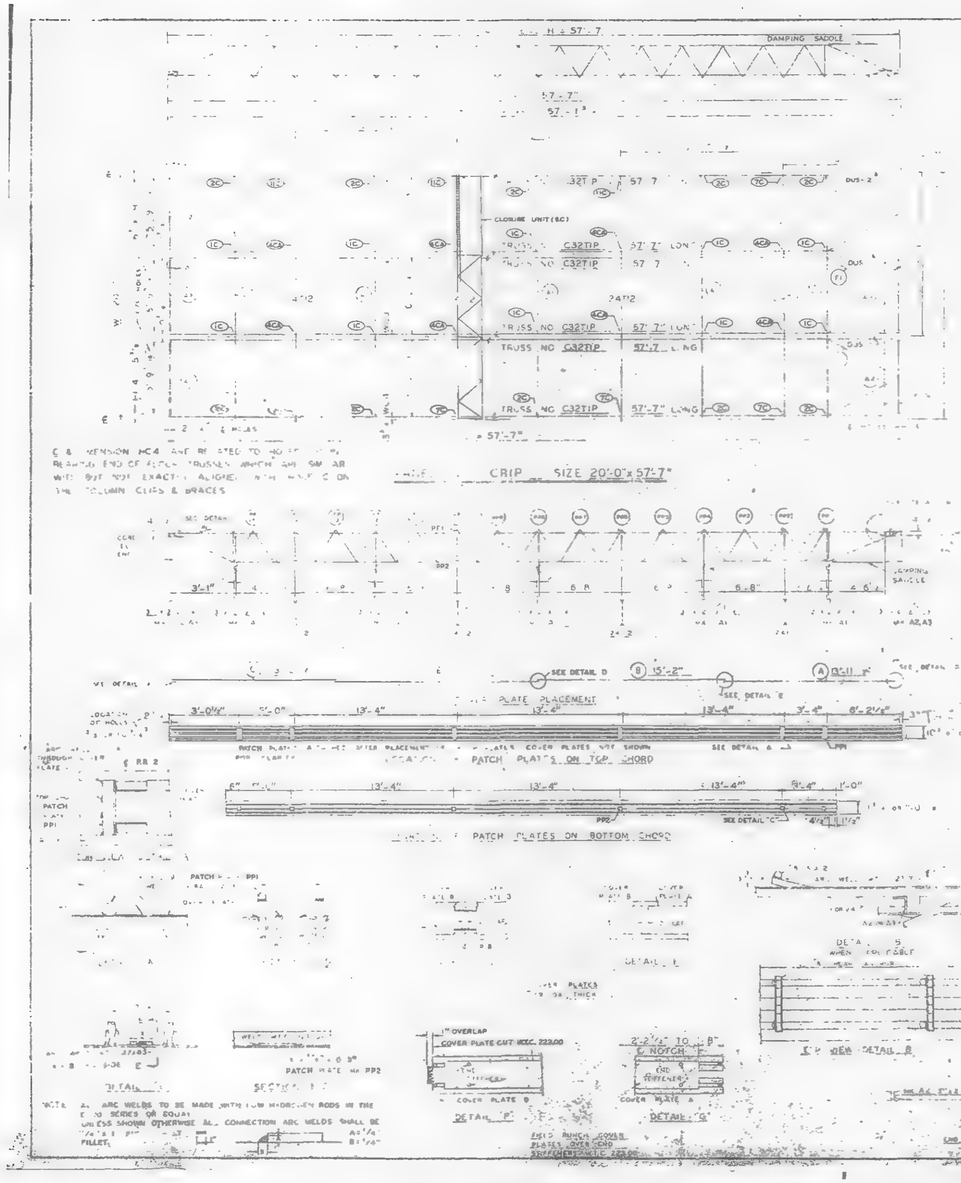
APPROVED FOR FABRICATION BY — DATE

DRAWN — DATE OCT 23, 1969

CHECKED — DATE OCT 23

FABRICATION SHT. NO.

DETAILED BY



REQUIRED MATERIAL PER PANEL				REF. DRWG
MATERIAL	MK	PCS	SIZE	
FLAT TOP TRUSSES				ST 201-P
				B-1-12
ANGLES				ST 403
				ST 403
ANGLES				ST 402
PATCH PLATES				ST 400
				ST 400
COVER PLATES				ST 303
				ST 303
				ST 304
ANGLE CLIPS				ST 400
"B" SHEAR ANCHOR				ST 400
DAMPING SADDLE				ST 298
				ST 233
CONNECTION BAR				ST 400
CLOSURE UNIT				ST 212
				CD 206
CONNECTION PLATES				ST 400
				ST 400
				ST 400

LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 202 OR CD 204.

NO.	DATE	REVISION	BY

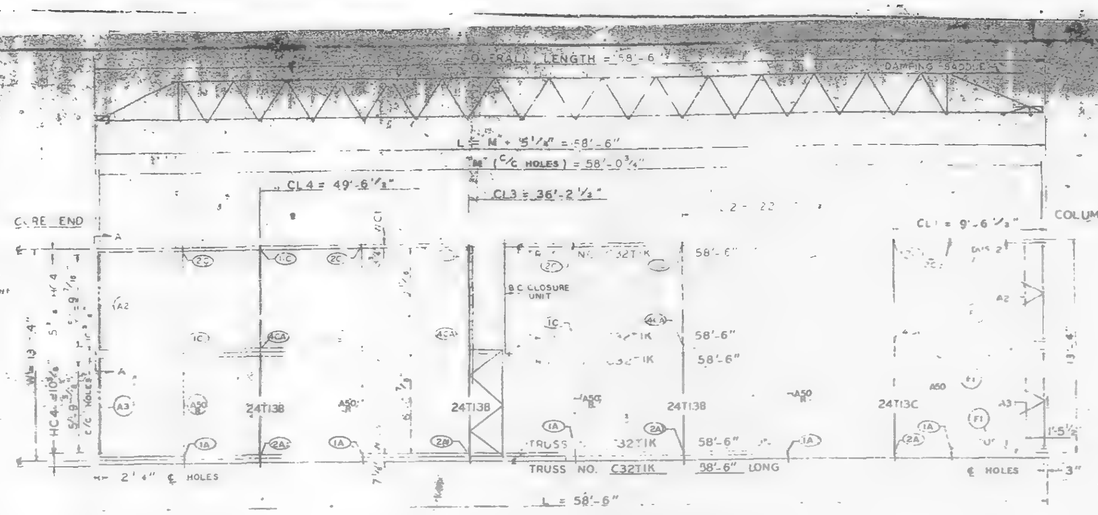
AB4 331	3.69	
AB4 10-18 & 39	7-22-68	
AB4 41	7-22-98	
	10-11-68	
	3-28	
	7-22-98	
	7-22-68	
AB4 42	10-22-68	

BLDG. FAO 74 (M)

CRIP SZ 57'-7"

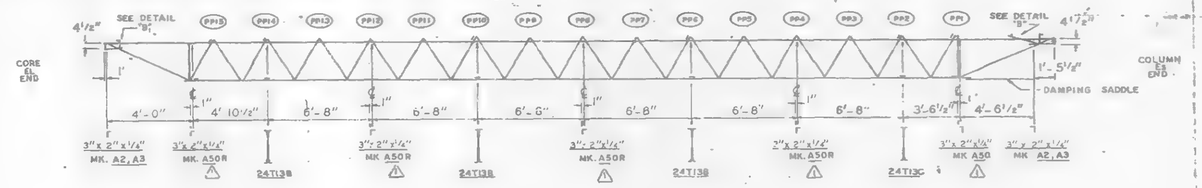
FABRICATION BY LACLEDE STEEL COMPANY
AT MADISON, ILLINOIS

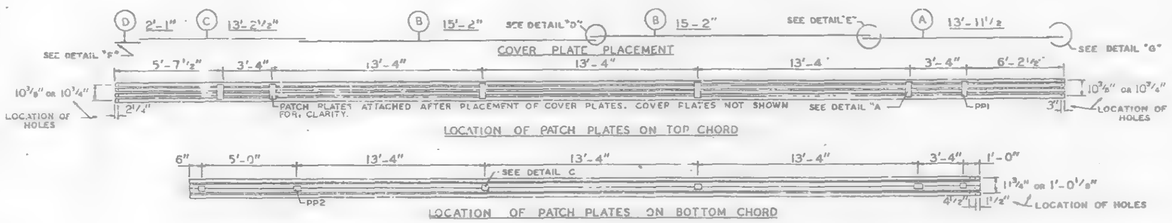
APPROVED FOR FABRICATION FOR FONVA	DATE 11/1/68	DRAWN BY L.A.	
		DATE OCT. 23, 1968	
APPROVED FOR FABRICATION FOR FABRICATOR	DATE	CHECKED BY J.N.CHURCH IN CHARGE	
		DATE OCT. 23, 1968	
		FABRICATOR'S JOINT NO.	SHEET NO.
DETAILED BY RCC WEBB		WEIGHT 221	TP CD

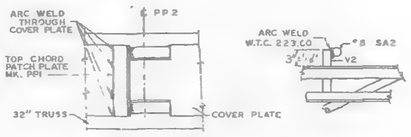


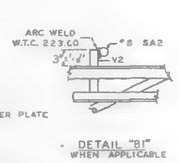
PANEL NO. CR7K SIZE 13'-4" x 58'-6"

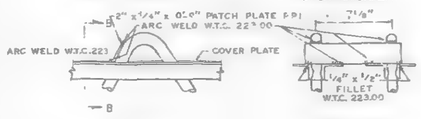
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

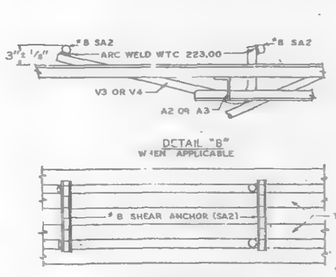


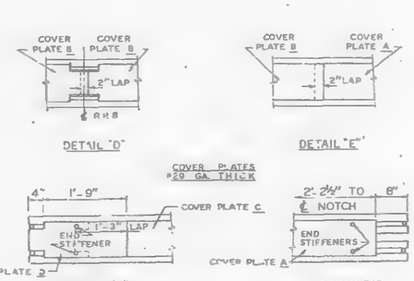


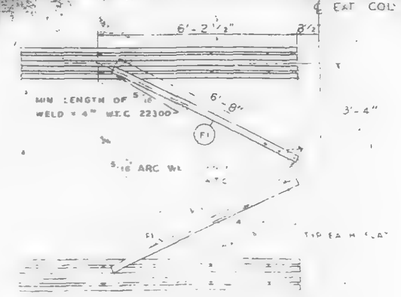




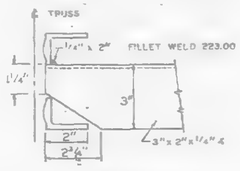


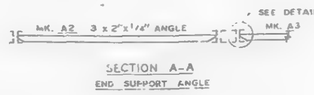


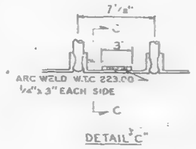


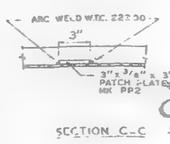


NUMBERS AND LETTERS IN ELLIPSES i.e. (3) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204 - CD 229.









REQUIRED MATERIAL LIST				
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES				
				8" 213#
				61 & 33
COVER PLATES				
			9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS				ST 400
8" SHEAR ANCHOR				ST 400
DAMPING SADDLE				
CONNECTION BAR			1" x 1'-3"	
CONNECTION PLATES				ST 400
				ST 400
				ST 400
				ST 400
				ST 303

NOTES: (1) ALL ARC WELDS SHALL BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

REF DRWG		
7-A84-15.1	10-4-68	
7-A84-15 & 16	7-22-68	
7-A84-42	10-15-68	
SA-124	1-6-69	
7-A83-80	10-15-68	
7-A81-24	1-6-69	
7-A82-8	7-22-68	

4 4-25-69 AS NOTED GDC

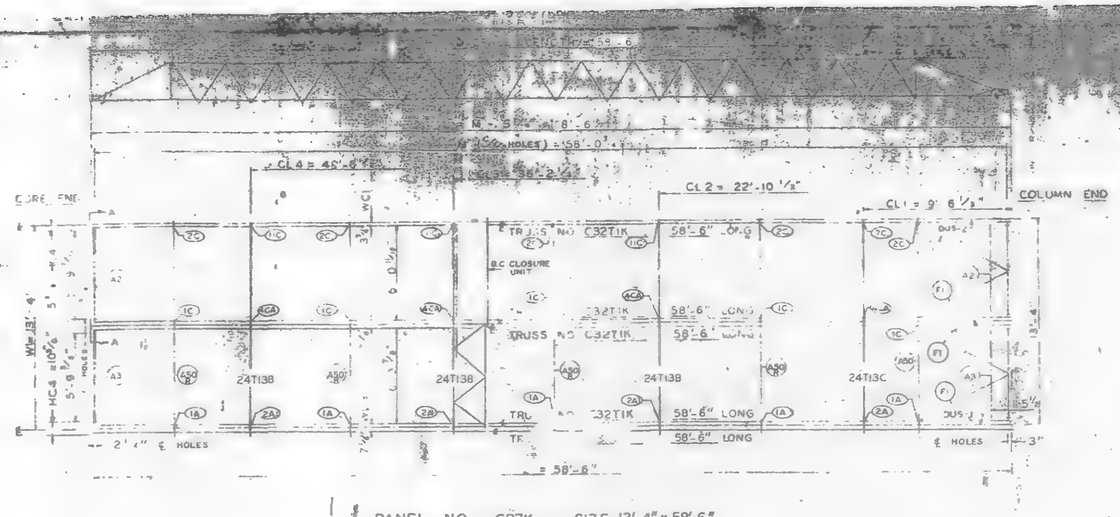
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 4"

PANEL CR7K - 13'-4" x 58'-6"

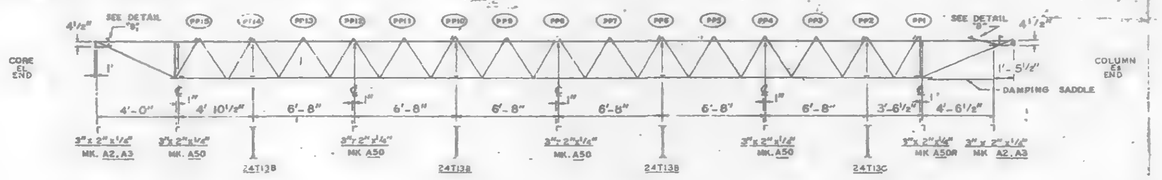
BLDG. B - 45 (WEST ONLY)

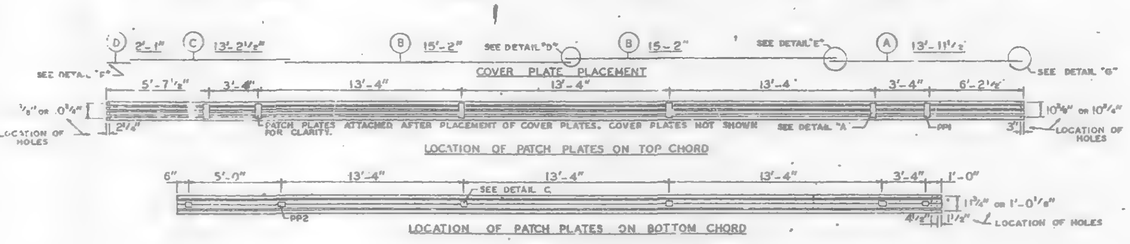
James Lotta 4/2/69

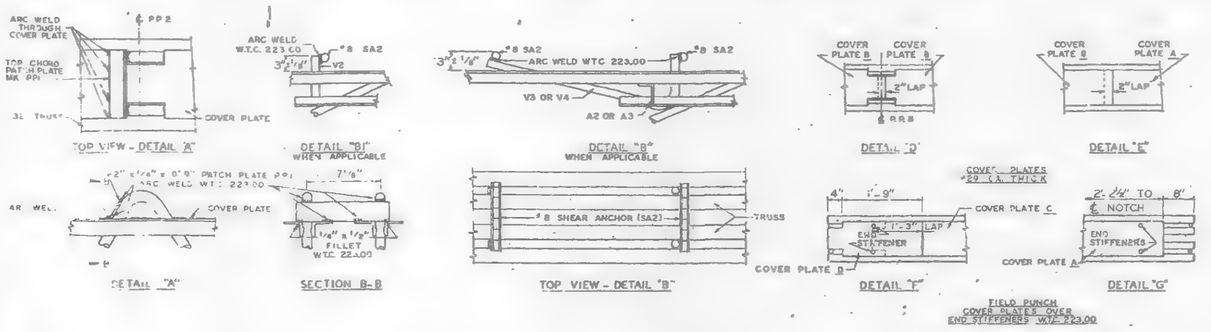


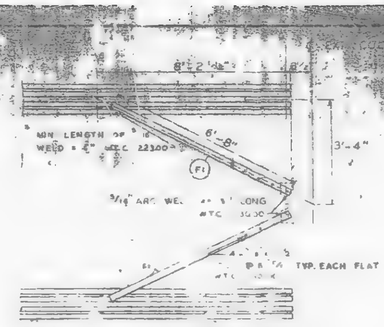
PANEL NO. CR7K SIZE 13'-4" x 58'-6"

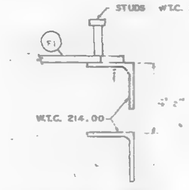
℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.









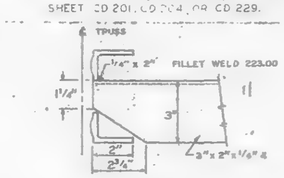


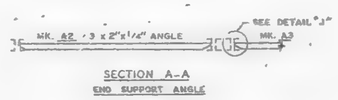
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

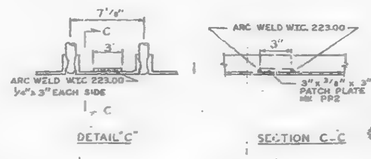
FLOOR TRUSSES	T1	1		
BRIDGING TRUSSES	T3B	3	24T13B	ST 403
	T3C	1	24T13C	ST 403
ANGLES	A2	2	3" x 2" x 1/4" x 5'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11"	ST 403
	A50	3	3" x 2" x 1/4" x 1'-4"	ST 403
FLATS	F1	4	2" x 5" x 0'-8"	ST 402
FLATS	PP1	8	2" x 4" x 1'-3"	ST 400
FLATS	PP2	16	3" x 5" x 0'-6"	ST 400
COVER PLATES	B	8	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 3'-2"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	CI	13	3" x 1 1/2" x 5/16" x 0'-6"	ST 400
8 SHEAR ANCHOR	SA2	9	8" x 1/2"	ST 400
DAMPING SADDLE	DS	2	1/2" x 8" x 1'-0"	ST 298
	DS-2	1	1/2" x 8" x 1'-0"	ST 298
CONNECTION BAR	CBH	4	1" x 8" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	1/2" x 8" x 6'-2"	ST 400
	P2	4	4 1/2" x 10" x 7'-9"	ST 400
	P3	1	4" x 7" x .30" x 1'-0"	ST 400
	P14	4	3" x 5" x 0'-11"	ST 418
CLOSURE UNIT	BC	3	11 1/4" O 8'-8" TUBE	ST 2-38

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

NUMBERS AND LETTERS IN ELLIPSES ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEET CD 201, CD 204, OR CD 229.







NO	DATE	REVISION	BY

REF. DRWG		
	7-A84-15J	10-4-68
	7-A84-15 & 16	7-22-68
	7-A84-42	10-15-68
	3A-124	1-6-69
	7-A83-80	10-15-68
	7-A81-24	1-6-69
	7-A82-8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A, FLOORS 45 (WEST ONLY)
PANEL CR7K - 13'-4" x 58'-6"
BLDG. B - 45 (WEST ONLY)

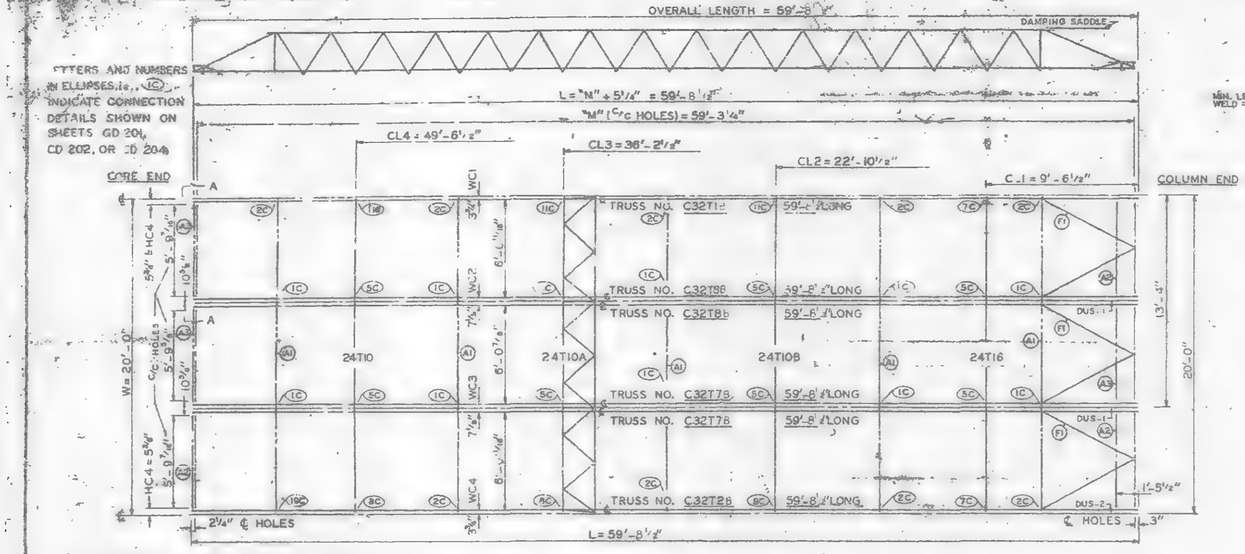
FABRICATED BY LACLEDE STEEL COMPANY
APPROVED FOR FABRICATION — DATE
APPROVED AS A FABRICATOR — DATE
BY FABRICATOR

DES'N DRAWING NO. 80 PLATE
DRAWN BY DATE MARCH 24, 1969
CHECKED BY DATE MARCH 24, 1969
FABRICATION UNIT NO 261
SHEET NO OF PROJ. NOS.
SHEET NO CP-CR7K

James White 4/22/69

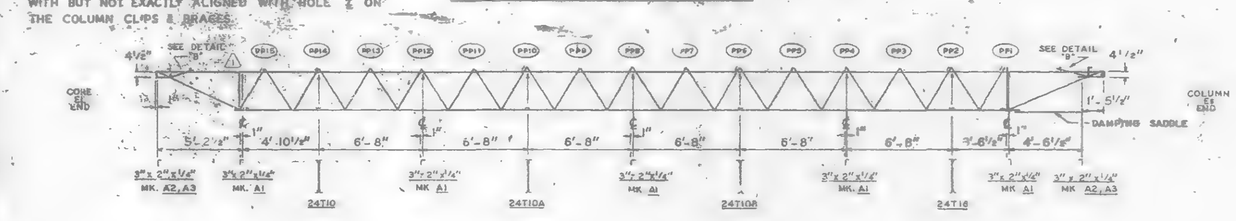
LACLEDE STEEL CO.

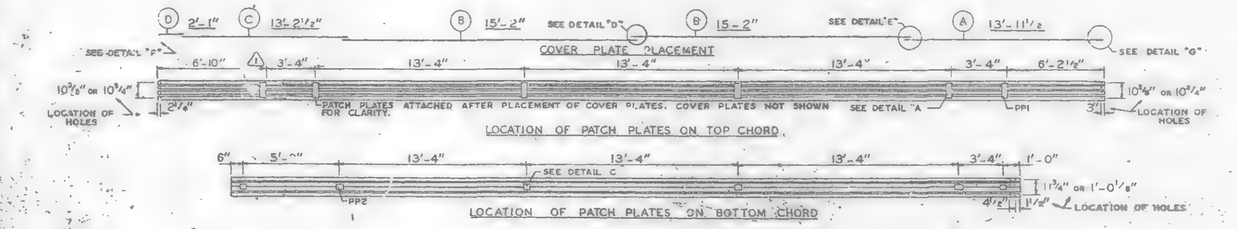
LETTERS AND NUMBERS IN ELLIPSES, i.e., (2C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS GD 201, GD 202, OR GD 204



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D5B . SIZE 20' x 59'-8 1/2"

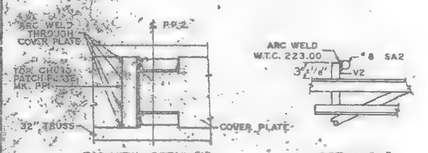




COVER PLATE PLACEMENT

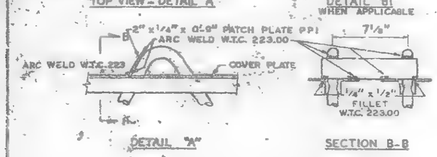
LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

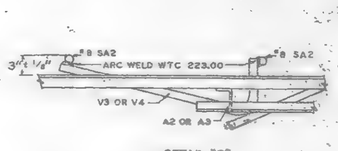


TOP VIEW - DETAIL "A"

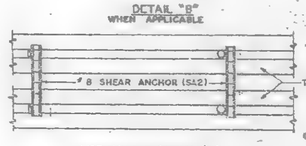
DETAIL "B1" WHEN APPLICABLE



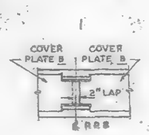
DETAIL "A" SECTION B-B



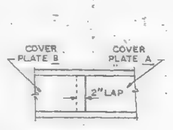
DETAIL "B" WHEN APPLICABLE



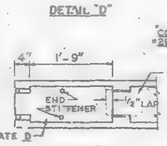
TOP VIEW - DETAIL "B"



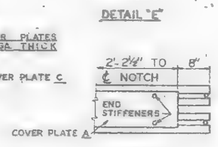
DETAIL "D"



DETAIL "E"

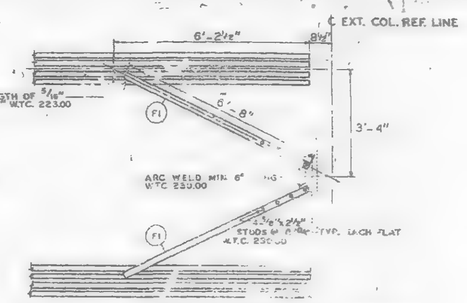


DETAIL "F"

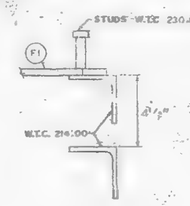


DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



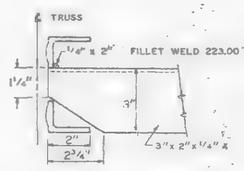
TYPICAL PLAN OF TOP CHORD AT END DIAGONAL TRUSS BRACES PLACED OVER DECK, W.T.C. 223.00



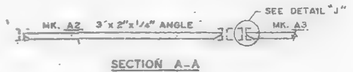
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				FF
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T1B	1	C32T1B — 59'-8 1/2"	T 2018
	T2B	1	C32T2B - 59'-8 1/2"	ST 202B
	T7B	2	C32T7B - 59'-8 1/2"	ST 207B
	T8B	2	C32T8B - 59'-8 1/2"	ST 208B
ERIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1 4" x 16'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 7/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 7/16"	ST 403
DIAGONAL FLATS	F1	6	1'-2" x 5" x 8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-7"	ST 400
	PP2	18	3" x 5/8" x 0'-3"	ST 400
COVER PLATES	A	3	0" x .0135" x 13'-11 5/8"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	0" x .0135" x 13'-2 1/8"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2 7/8" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-0"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB2	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/8" x 3/4" x 8 1/8"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P4	3	8 1/2" x 1 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .39" x 0'-9"	ST 401

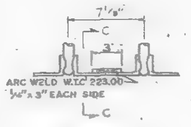
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



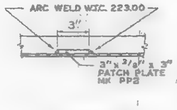
DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

NO.	DATE	REVISION	BY
2	7-1-69	AS NOTED	G.D.C
1	3-11-69	AS NOTED	G.D.C

REF. DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-71	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
S2-124	10-11-68
7-AB1-3	10-15-68
7-AB1-1, 3 & 4	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

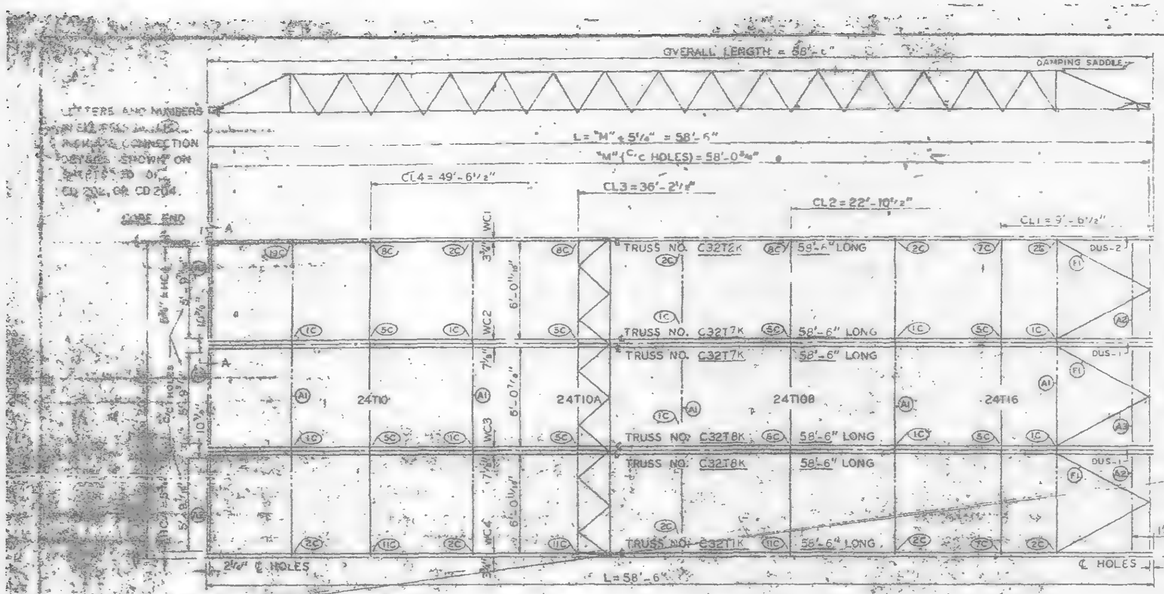
BLDG. A FLOORS 83 (NORTH)

PANEL D5B - 20' x 59'-8 1/2"

BLDG. B FLOORS 83 (WEST) (2)

FABRICATION BY: LACLEDE STEEL COMPANY

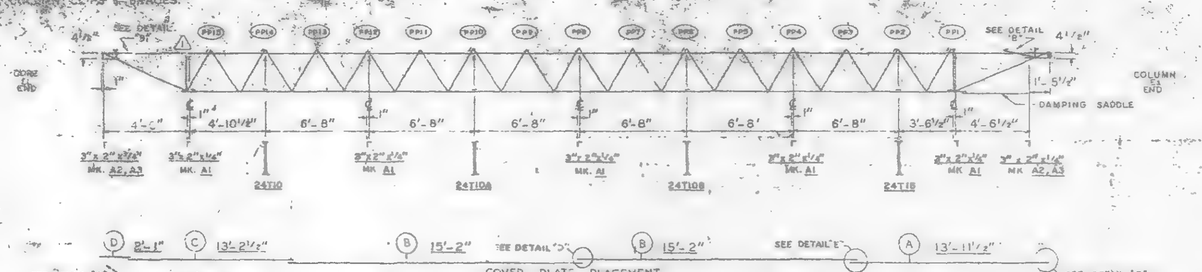
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-71	PLATE
APPROVED FOR FABRICATION BY: James Lichtenberger A.	DATE 4/2/70	DRAWN BY: gdc DATE JAN 14, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JAN 14, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: CARL WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FP D5B

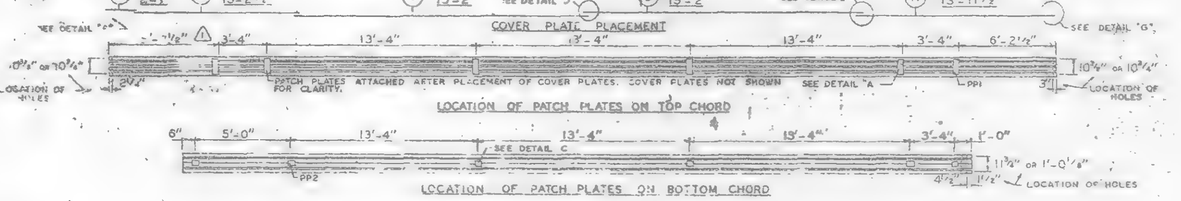


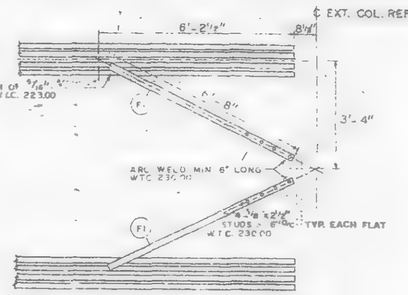
LETTERS AND NUMBERS IN SQUARES INDICATE CONNECTION DETAILS SHOWN ON SHEETS 2D OR 2E, CD 204, OR CD 206.

℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN ENDS AND OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON COLUMN CLIPS & BRACES.

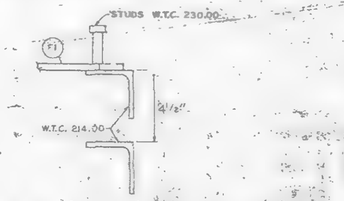
PANEL NO. D25K SIZE 20' x 58'-6"







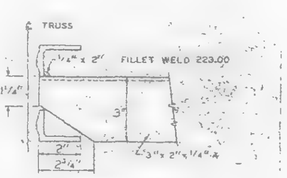
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	WGT
FLOOR TRUSSES	T1K	1	32T1K - 58'-6"	
	T2K	1	32T2K - 58'-6"	
	T7K	1	32T7K - 58'-6"	
	T8K	2	32T8K - 58'-6"	
BRIDGING TRUSSES	T10	1	24T10 - 9'-0"	
	T10A	1	24T10A - 6'-0"	
	T10B	1	24T10B - 9'-0"	
	T16	1	24T16 - 14'-0"	
3" x 2" x ¼" ANG	A1	5	3" x 2" x ¼" x 1'-4"	
	A2	4	3" x 2" x ¼" x 1'-5"	
	A3	2	3" x 2" x ¼" x 1'-5"	
DIAGONAL FLATS	F1	8	1" x 6" x 1'-8"	
PATCH PLATES	PP1	2	2" x 7" x 1'-8"	
	PP2	8	3" x 8" x 1'-8"	
COVER PLATES	A	3	9" x .135" x 13'-2 1/2"	ST 303
	B	6	9" x .135" x 15'-2"	ST 303
	C	3	9" x .135" x 13'-2 1/2"	ST 303
	D	3	6" x .135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2 1/2" x 2 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3/4" x 3'-0"	ST 298
	DUS-2	1	3 1/2" x 3/4" x 3'-0"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	8	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	F1	4	3 1/2" x 3 1/2" x 8 1/2"	ST 400
	P2	1	4 7/8" x .38" x 0'-8"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .38" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

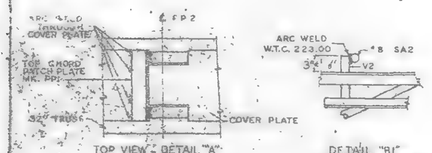


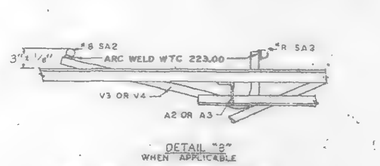
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

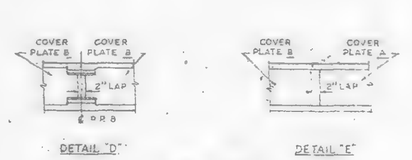
NO.	DATE	REVISION	BY
2	7-1-69	AS NOTED	G.D.C.
1	3-11-69	AS NOTED	G.D.C.

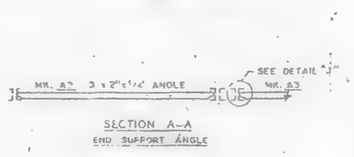
REF. DRWGS.

7-ABC-5 & 11	7-22-68
7-AB4-72	11-25-68
7-AB4-3	10-15-68
7-AB4-13 & 18	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-68-5	10-15-68
7-481-2.704	7-22-68









FLOOR FRAMING DETAILS
FOR
AIR TRAFFIC CONTROL TOWER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

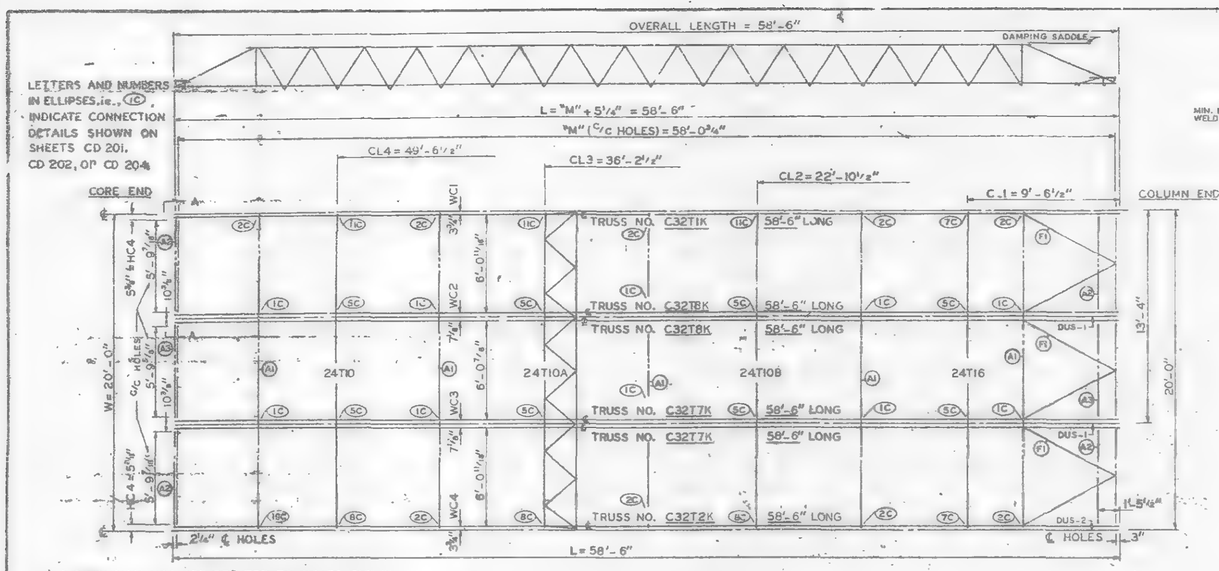
BLDG. A FLOORS 45 & 46 (SOUTH) PANEL DETAIL = 58'-6

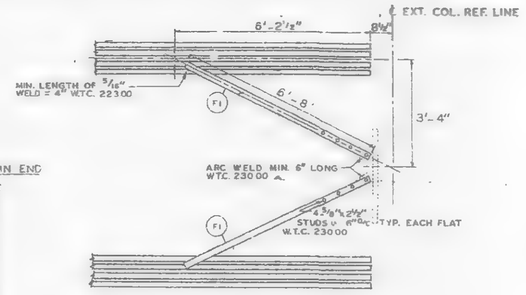
BLDG. B FLOORS 45 & 46 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

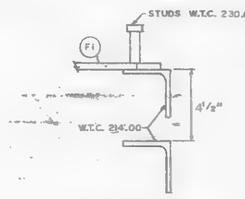
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. T-AB3 DR 4-15-68
APPROVED FOR FABRICATION BY PORT A	DATE 1/21/70	DRAWN BY GDC DATE JAN. 4, '69
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATION	DATE	CHECKED BY: TM CH DATE JAN. 14, 1969
DETAILED BY A. LARL WEBER		FABRICATION CONT. NO. W.O. 221

SHEET FF D25K





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



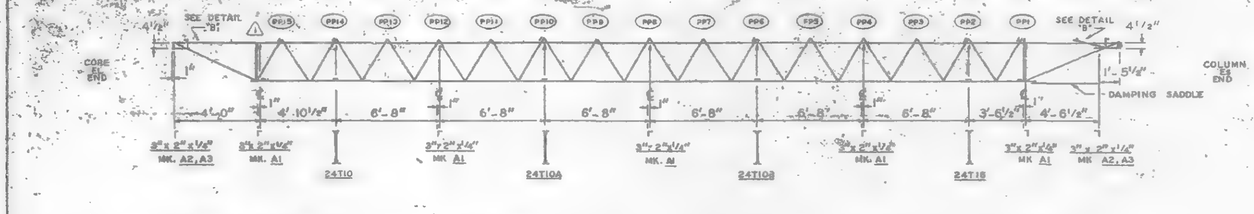
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

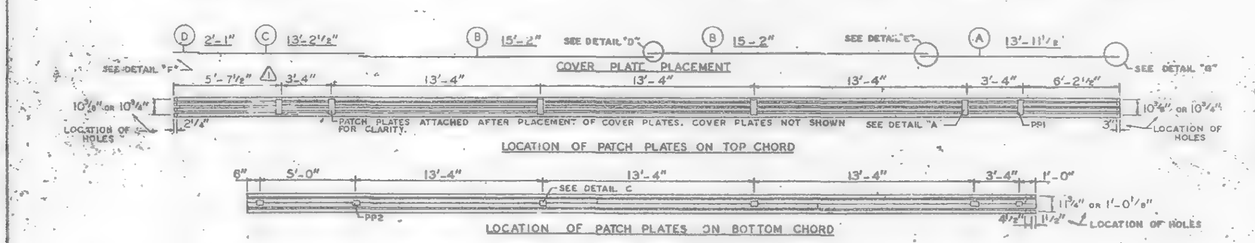
REQUIRED MATERIAL PER PANEL				EF
MATERIAL	MK.	PCS	SIZE	WT. (LBS.)
FLOOR TRUSSES	T1K	1	C32T1K - 58'-6"	ST 207K
	T2K	1	C32T2K - 58'-6"	ST 207K
	T7K	2	C32T7K - 58'-6"	ST 207K
	T8K	2	C32T8K - 58'-6"	ST 208K
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 14' 11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-1 5/8"	ST 403
	A3	2	3" x 2" x 1/4" x 8'-1 5/8"	ST 403
DIAGONAL FLATS	F1	8	1'-2" x 8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	15	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	8	9" x .0135" x 18'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1 1/2" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3/16" x 3'-6 7/8"	ST 298
	DUS-2	1	3/16" x 3/16" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	5	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 3/4" x 8 1/2"	ST 400
	P2	1	4 1/8" x .38" x 0'-8"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-3"	ST 401

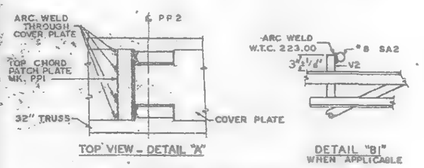
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D5K SIZE 20' x 58'-6"

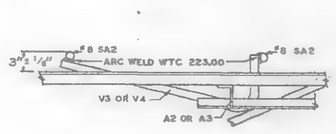




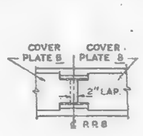


TOP VIEW - DETAIL "A"

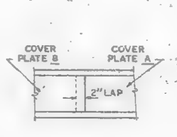
DETAIL "B1" WHEN APPLICABLE



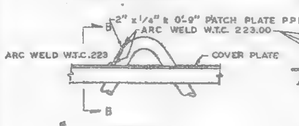
DETAIL "B" WHEN APPLICABLE



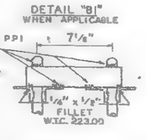
DETAIL "D"



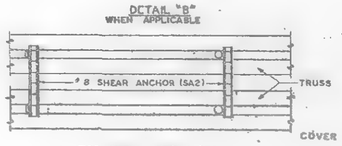
DETAIL "E"



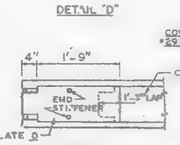
DETAIL "A"



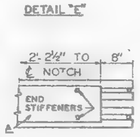
SECTION B-B



TOP VIEW - DETAIL "B"



DETAIL "F"

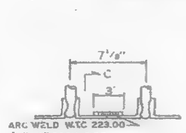


DETAIL "G"

COVER PLATES #29 GA THICK

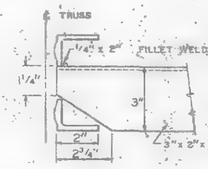
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

SECTION A-A
END SUPPORT ANGLE



DETAIL "C"

SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY
2	7-1-69	AS NOTED	G.D.C
1	3-11-69	AS NOTED	G.D.C

REF. DRWGS.

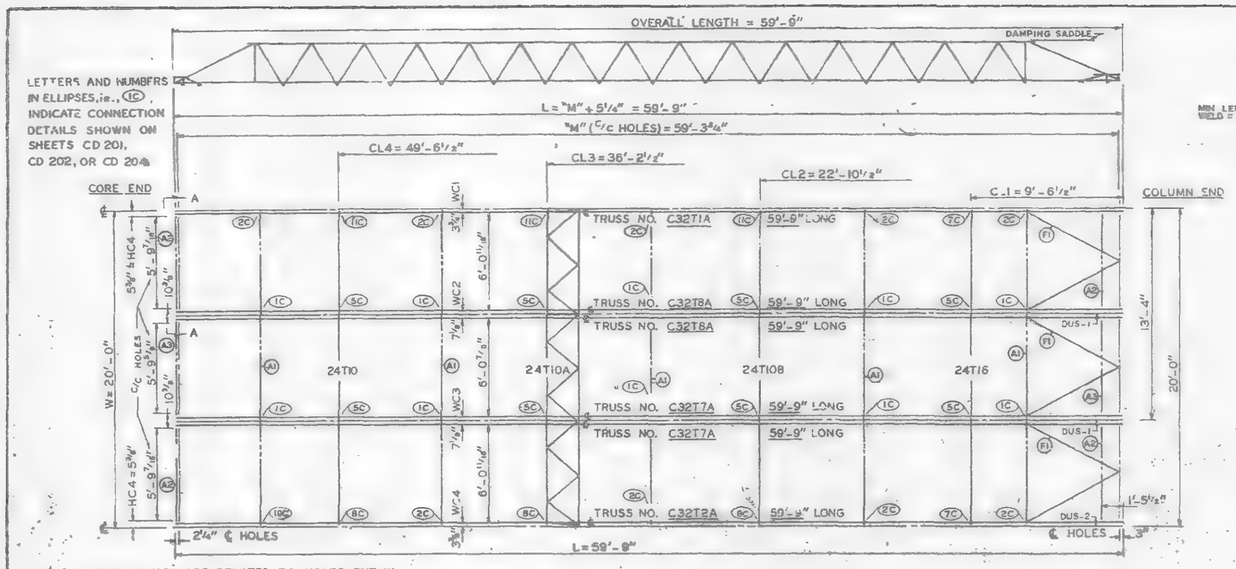
7-A82-5 & 11	7-22-68
7-A83-71	11-25-68
7-A84-3	10-15-68
7-A84-15 & 16	7-22-68
7-A84-42	10-15-68
SP-124	10-11-68
7-181-5	10-15-68
7-181-2 & 3	7-24-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)
PANEL D5K SIZE 20'-0" x 58'-6"
BLDG. B FLOORS 45 (EAST & WEST) 46 (EAST) (2)

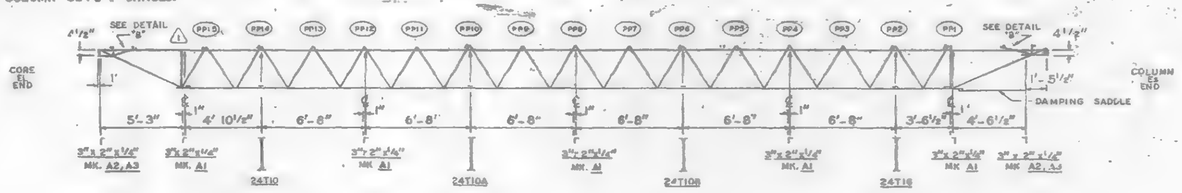
FABRICATION BY: LACLEDE STEEL COMPANY

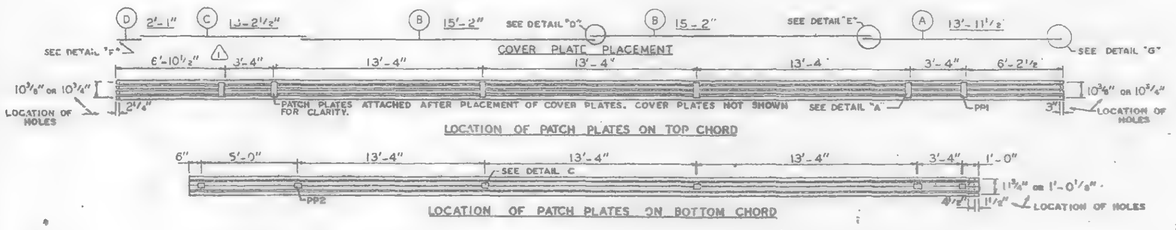
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A82-71	PLATE
APPROVED FOR FABRICATION BY James Lockhart for A.	DATE 1/2/70	DRAWN BY gdc DATE JAN 14, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHUBA DATE JAN 15, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY C. CARL WEBER		FABRICATION CONT NO WTC 221	SHEET NO FP 5K

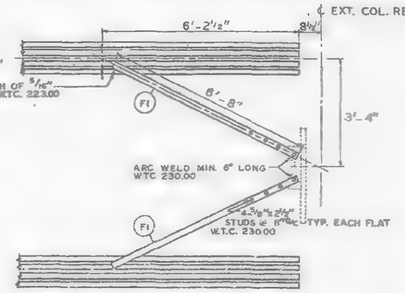


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

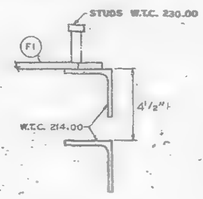
PANEL NO. DIA SIZE 20' x 59'-9"







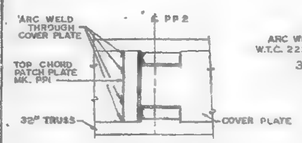
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC. 223.00



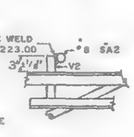
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T1A	1	C32T1A - 59'-9"	ST 201A
	T2A	1	C32T2A - 59'-9"	ST 202A
	T7A	2	C32T7A - 59'-9"	ST 207A
	T8A	2	C32T8A - 59'-9"	ST 208A
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 5/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 5/8"	ST 403
DIAGONAL FLATS	F1	8	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 19'-11 1/2"	ST 303
	B	8	9" x .0135" x 19'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 B REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3'-8 7/8"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3'-8 7/8"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	8	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 8 5/8" x 8 1/2"	ST 400
	P2	1	4 1/8" x .38" x 0'-8"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .38" x 0'-8"	ST 401

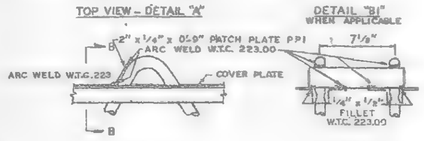
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUA.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



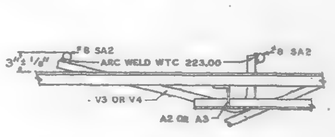
TOP VIEW - DETAIL "A"



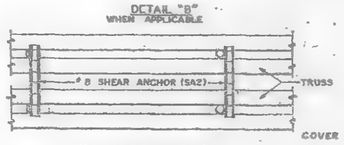
DETAIL "B1" WHEN APPLICABLE



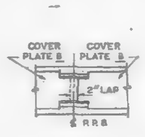
DETAIL "A" SECTION B-B



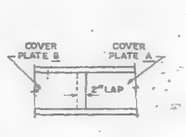
DETAIL "B" WHEN APPLICABLE



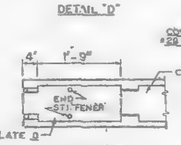
TOP VIEW - DETAIL "B"



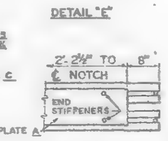
DETAIL "D"



DETAIL "E"

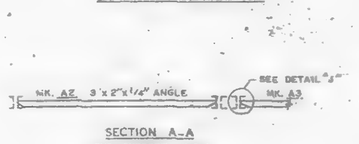


DETAIL "F"

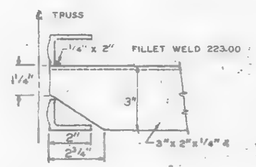


DETAIL "G"

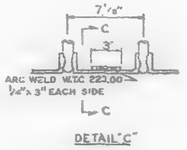
FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00



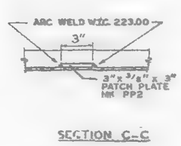
SECTION A-A END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



DETAIL "C"



SECTION C-C

1	6-10-69	AS NOTED	G.D.C.
BY	DATE	REVISION	BY

REF. DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-9	10-15-68
7-AB4-39	7-22-68
7-AB4-15 & 16	7-22-68
7-AB4-42 & 3	10-15-68
SA-124	1-8-69
7-AB1-2,3 & 4	7-22-68
7-AB1-3,4 & 5	10-15-68

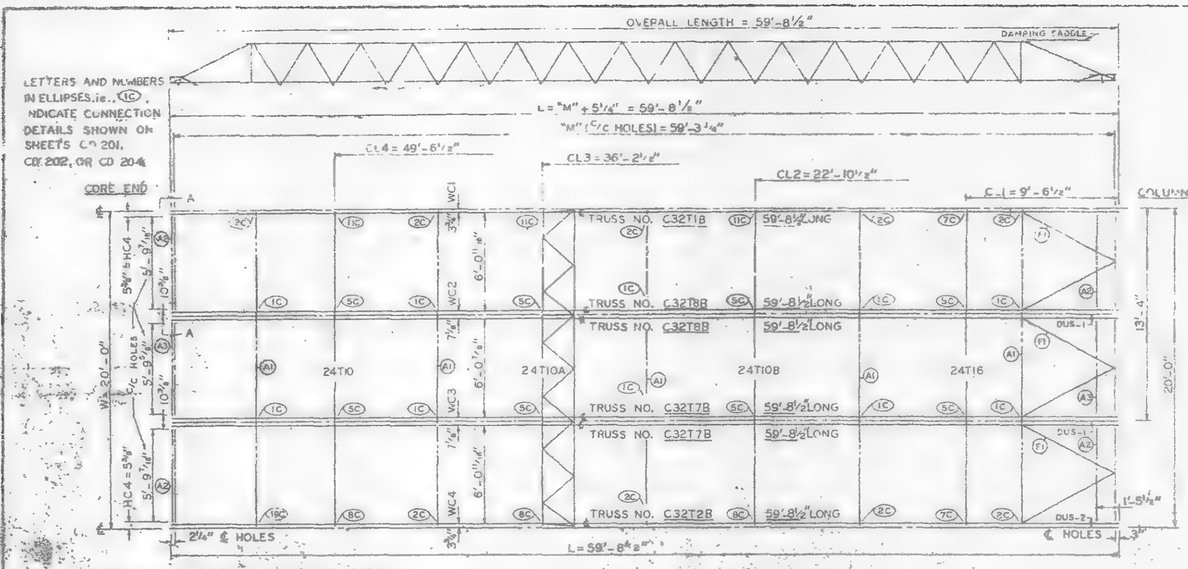
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

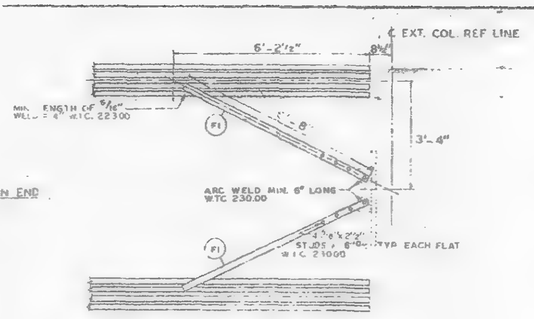
BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 4-58, 60-66, 68, 69 (NORTH) PANEL [illegible] 20' x 59'-9"

BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-69 (WEST)

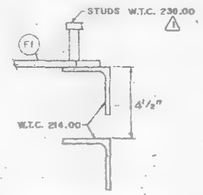
FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-9 4-15-68	PLATE
APPROVED FOR FABRICATION BY James Lichtenberg A.A.	DATE 12/10	DRAWN BY: gdc DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.N.CHURA DATE JULY 22, 1968	IN CHARGE OF PROD. DEV
DETAILED BY: [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO FP DIA





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



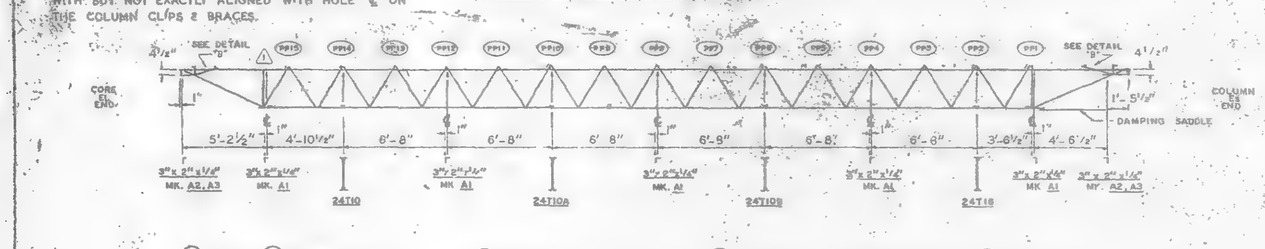
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-1 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

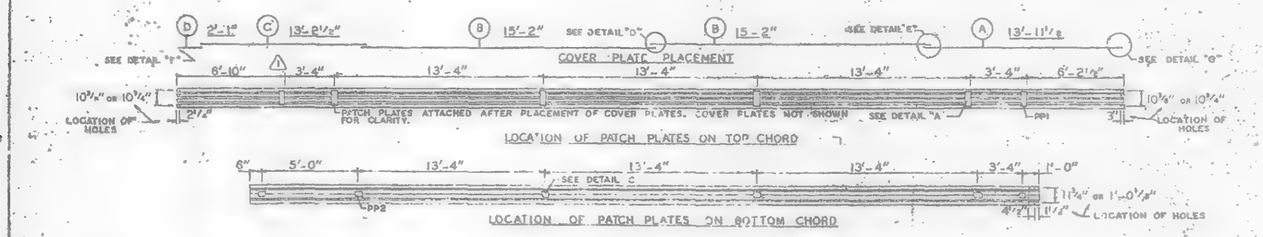
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T1B	1	C32T1B - 59'-8 1/2" LONG	ST ... B
	T2B	1	C32T2B - 59'-8 1/2" LONG	ST ... B
	T7B	2	C32T7B - 59'-8 1/2" LONG	ST ... 7B
	T8B	2	C32T8B - 59'-8 1/2" LONG	ST ... 8B
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11"	ST 403
DIAGONAL FLATS	F1	2	1" x 8" x 3'-8	ST 400
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	18	3" x 1'-8" x 0'-3"	ST 400
COVER PLATES	A	3	10" x 0'-3 3/32" x 13'-1 1/2"	ST 303
	B	6	8" x 0'-1 9/32" x 13'-2"	ST 303
	C	3	9" x 0'-3 5/32" x 13'-2 1/2"	ST 303
	D	3	8" x 0'-3 5/32" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 3 1/16" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-8 7/8"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 2'-6" x 3'-8 7/8"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	2	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/4" x 6 1/2"	ST 400
	P2	1	4 1/2" x 3/8" x 0'-8"	ST 400
	P3	1	4 1/2" x 3/8" x 0'-8"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x 3/8" x 0'-8"	ST 401

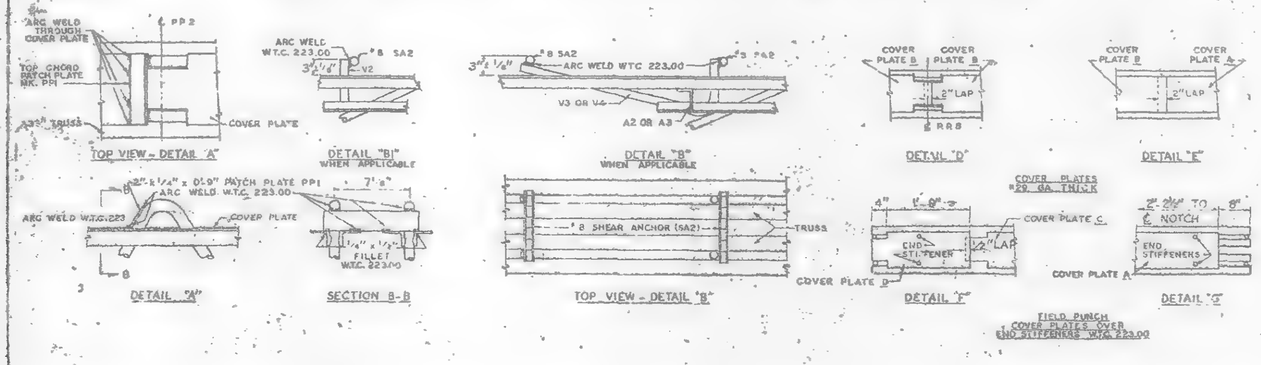
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

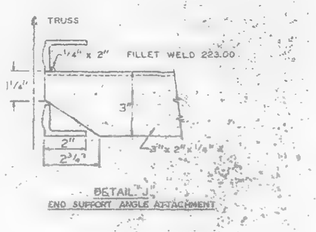
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1B SIZE 20' x 59'-8 1/2"









NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	GDC

⚠ REF. DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-9	10-15-68
7-AB4-3,1	1-3-68
7-AB4-15,6 & 20	2-22-44
7-AB4-42 & 3	12-15-68
SC-124	1-6-69
7-181-2,3 & 4	7-22-68
7-181-5	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 84-91, 93-106 (IN)
PANEL D1B - 20' x 59'-8 1/2"
BLDG. B FLOORS 84-91, 93-106 (WEST) ⚠

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-9	
APPROVED FOR FABRICATION BY James Worthington A.	DATE 12/10	DRAWN B DATE OCT 24, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.N.CHIRA DATE OCT 24, 1968	IN CHARGE PROD DEV
DETAILED BY R. CARL WEBER		FABRICATION CONTR. NO. WTC 221	SHEET NO. FP-D1B

LETTERS AND NUMBERS IN ELLIPSES, e.g. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

CORE END

TRUSS NO. C32T1C 59'-8" LONG

TRUSS NO. C32T8C 59'-8" LONG

TRUSS NO. C32T7C 59'-8" LONG

TRUSS NO. C32T2C 59'-8" LONG

24T1D 24T10A 24T10B 24T1E

W = 20'-0"

HC4 = 5'-9 7/16"

L = 59'-8"

2 3/4" ℄ HOLES

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1C SIZE 20' x 59'-8"

SEE DETAIL "D" SEE DETAIL "C" DAMPING SADDLE CORE END COLUMN END

5'-2" 4'-10 1/2" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6 1/2" 4'-6 1/2"

3/8" x 2" x 1'-1/2" MK. A2, A3 | 3/8" x 2" x 1'-1/2" MK. A1 | 3/8" x 2" x 1'-1/2" MK. A1 | 3/8" x 2" x 1'-1/2" MK. A1 | 3/8" x 2" x 1'-1/2" MK. A1 | 3/8" x 2" x 1'-1/2" MK. A1 | 3/8" x 2" x 1'-1/2" MK. A1 | 3/8" x 2" x 1'-1/2" MK. A2, A3

24T1D 24T10A 24T10B 24T1E

D 2'-1" C 13'-2 1/2" B 15'-2" SEE DETAIL "F" A 15'-2" SEE DETAIL "E" 13'-11 1/2"

SEE DETAIL "F" SEE DETAIL "A" SEE DETAIL "G"

6'-8 1/2" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-8 1/2"

COVER PLATE PLACEMENT

10 3/4" OR 10 1/4" LOCATION OF HOLES. 2 1/4" PATCH PLATES FOR CLARITY. PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN SEE DETAIL "A" PP1 1 3/4" OR 10 1/4" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON TOP CHORD

6" 5'-0" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

SEE DETAIL PP2 11 3/4" OR 1'-0 1/8" LOCATION OF HOLES 4 1/2" 1 1/2"

LOCATION OF PATCH PLATES ON BOTTOM CHORD

ARC WELD THROUGH COVER PLATE PP2 TOP CHORD PATCH PLATE MK. PP1 32" TRUSS COVER PLATE

TOP VIEW - DETAIL "A"

ARC WELD W.T.C. 223.00 3 1/2" 1 7/8" V2 ⅜ SA2

DETAIL "B1" WHEN APPLICABLE

⅜ SA2 ARC WELD W.T.C. 223.00 ⅜ SA2 3 1/2" 1 7/8" V3 OR V4 A2 OR A3

DETAIL "B" WHEN APPLICABLE

COVER PLATE B COVER PLATE B 2" LAP ℄ PP2

DETAIL "D"

COVER PLATE B COVER PLATE A 2" LAP

DETAIL "E"

2" x 1/4" x 0'-8" PATCH PLATE PP1 ARC WELD W.T.C. 223.00 ARC WELD W.T.C. 223 COVER PLATE B

DETAIL "A"

7 1/8" 1/4" x 1/8" FILLET W.T.C. 223.00

SECTION B-B

⅜ SHEAR ANCHOR (SA2) TRUSS COVER PLATE B

TOP VIEW - DETAIL "B"

4" 1'-9" END STIFFENER 1" LAP COVER PLATE ℄ COVER PLATES ¼" GA. THICK

DETAIL "F"

2'-2 3/4" TO 8" ℄ NOTCH END STIFFENERS COVER PLATE A

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

℄ EXT. COL. REF LINE 8 1/4" 5'-0" 9'-0" 3'-0" 6" LONG TYP EACH FLAT

TYPICAL PLAN OF TOP CHORD @ COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C 223.00

STIFF. W.T.C 230.00 A F1 4 1/2" W.T.C 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

CHORDS	C1	[illegible]	ST 4[illegible]
	C	[illegible]	ST 4[illegible]
	C2	[illegible]	ST 4[illegible]
	HC	2 [illegible]	ST 4[illegible]
DIAGONALS	TIDA	1 [illegible]	ST [illegible]
	TIDB	1 [illegible]	ST [illegible]
	TIC	1 [illegible]	ST [illegible]
	A2	4 [illegible]	ST [illegible]
	A3	2 [illegible]	ST [illegible]
	F1	8 [illegible]	ST [illegible]
	PP1	6 3" x 0'-1"	ST [illegible]
	PP2	6 3" x 0'-1"	ST [illegible]
	-	3 [illegible]	ST [illegible]
	D	3 8" x 0'-3 5/8" x 2'-1"	ST 300
ANGLES	C1	24 2" x 2" x 1/4" x 0'-8"	ST 401
"B" SHEAR ANCHOR	SA2	12 ⅜" ℄ REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2 3/16" x 3'-1" x 1'-4" x 3'-8"	ST 248
	DUS-2	1 3/16" x 1'-9" x 1'-4" x 3'-0 5/8"	ST 248
CONNECTION PLATES	CP1	1 1/2" ℄ x 1'-1"	ST 400
	CP2	2 1/2" ℄ x 1'-10"	ST 400
	-	4 [illegible]	ST 400
	PP2	1 4 1/2" x 0'-8" x 0'-8"	ST 400
	PP3	1 4 1/2" x 0'-8" x 1'-0"	ST 400
	PP4	3 6 1/2" x 1'-2" x 0'-8"	ST 400
	PP5	1 4 1/2" x 0'-8" x 0'-8"	ST 401

NOTES:
(1) ALL ARC WELDING TO BE MADE WITH LOW HYDROGEN ROD IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

WELD A 5/16" B 1/4"

MK. A2 3" x 2" x 1/4" ANGLE SEE DETAIL "J" MK. A3

SECTION A-A END SUPPORT ANGLE

7" C 3" 1/4" x 3" EACH SIDE ARC WELD W.T.C 223.00

DETAIL "C"

ARC WELD W.T.C. 223.00 3" 3" x 3/8" x 3" PATCH PLATE MK. PP2

SECTION C-C

℄ TRUSS 1/4" x 2" FILLET WELD 223.00 1 1/2" 3" 2" 2 1/4" 3" x 3" x 5/16" x 4"

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	BY
1	6-10-69	AS NOTED	GDC

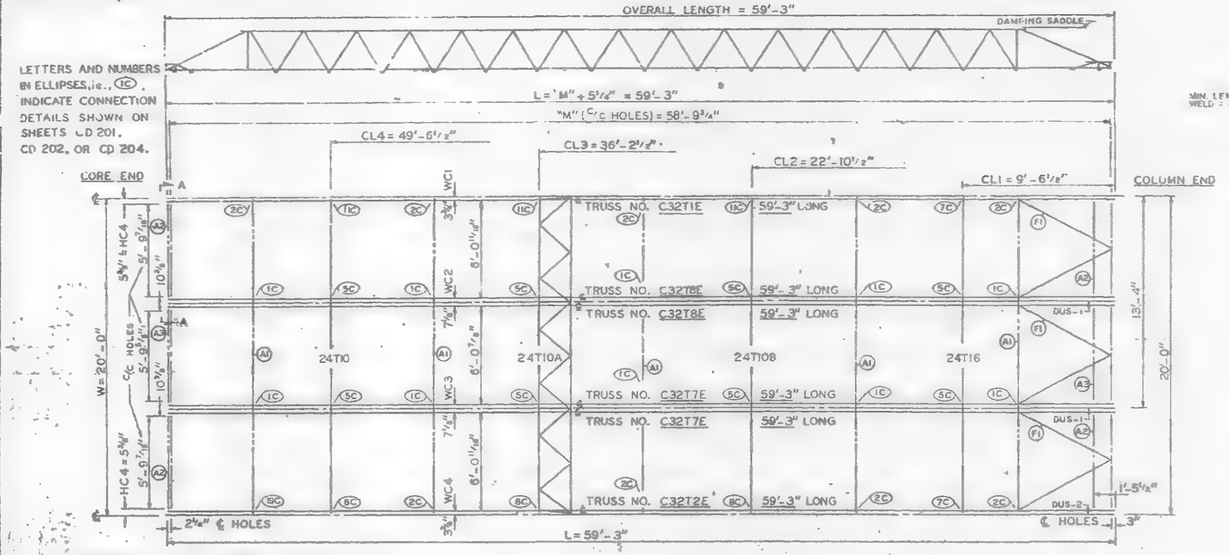
1 REF. DRWGS.

7-A82-5 & 11	7-22-66
7-A83-9	10-15-68
7-A84-1, 31	1-6-69
7-A84-15, 6 & 30	7-22-66
7-A84-42 & 3	10-15-68
SK-124	1-6-69
7-A81-3, 3 & 4	7-22-68
7-A81-5	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

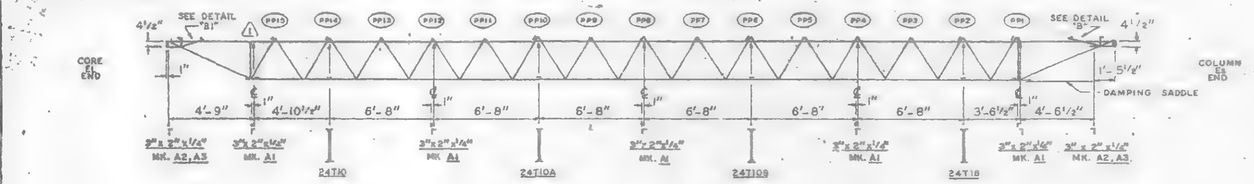
BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91 & ℄-106 (S)
PANEL NO. D1C - 59'-8"
BLDG. B FLOORS 50-58, 60-74, 79-91 & 93-106 (S) 1

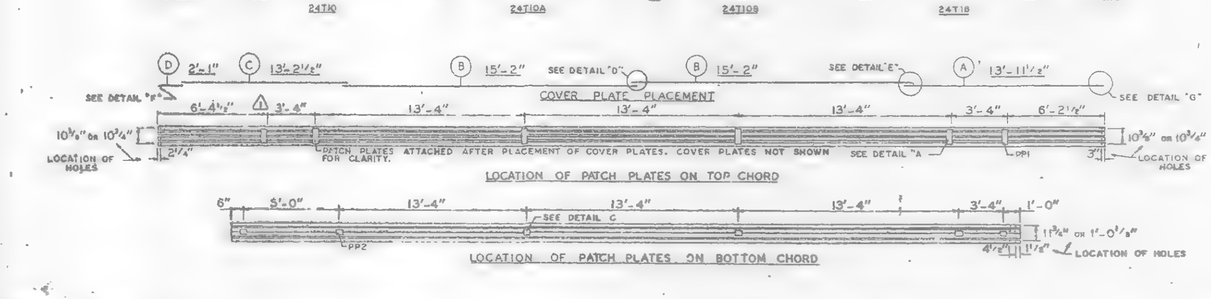
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James Wheeler DATE 12/70
APPROVED FOR FABRICATION BY [illegible] DATE
DETAILED BY A. CARL WEBER
DESIGN DRAWING NO 7-A83-9
DRAWN BY [illegible] DATE OCT 24 1968
CHECKED BY [illegible] DATE OCT 24 1968
FABRICATING CONT NO W.T.C. 221
SHEET NO FP D1C

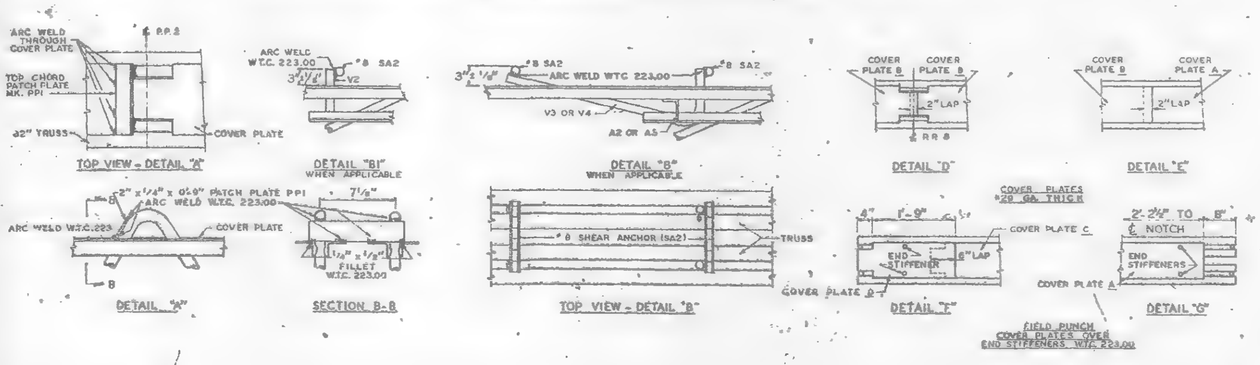


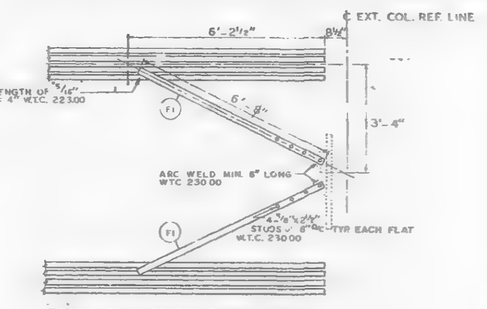
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DIE SIZE 20' x 59'-3"

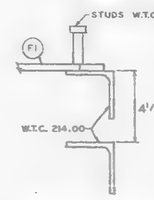








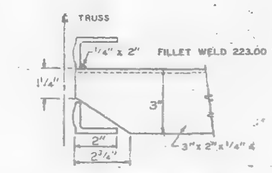
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



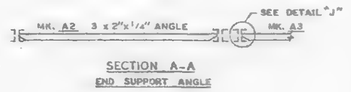
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/16" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				SEE DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T1E	1	C32T1E - 58'-9"	ST 201E
	T2L	1	C32T2E - 58'-9"	ST 202E
	T7E	2	C32T7E - 58'-9"	ST 202E
	T8L	2	C32T8E - 58'-9"	ST 203E
BRIDGING TRUSSES	T10	8	24T10 - 19'-11"	ST 210
	T10A	8	24T10A - 19'-11"	ST 210A
	T10B	8	24T10B - 19'-11"	ST 210B
	T16	8	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-7 3/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-7 3/16"	ST 403
DIAGONAL FLATS	F1	8	1 1/2" x 3/8" x 6'-8"	ST 702
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	16	3" x 3/8" x 0'-8"	ST
COVER PLATES	A	3	9" C135" x 17'-11 1/2"	ST 303
	B	6	9" C135" x 15'-2"	ST 303
	C	3	0"x C135" x 13'-2 1/2	ST 303
	D	3	9" x C135" x 6'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3'-6 3/4"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3'-6 3/4"	ST 298
CONNECTION BAR	CB1	4	1" ℄ x 1'-3"	ST 400
	CB4	6	1" ℄ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/8" x 3 1/2" x 6' 2"	ST 400
	P2	1	4 1/2" x .30" x 0'-8"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .30" x 0'-8"	ST 401

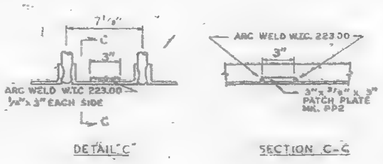
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 5/16" x 1" FULL THROAT FILLET.



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



NO.	DATE	REVISION	BY
1	6-8-69	AS NOTED	G.D.C

REF. DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-9	10-15-68
7-AB4-3.1	1-3-68
7-AB4-15 & 16,38	7-22-68
7-AB4-3 & 42	10-15-68
SA-124	1-6-69
7-AB1-2,3 & 4	7-22-68
7-AB1-5,4 & 5	10-15-68

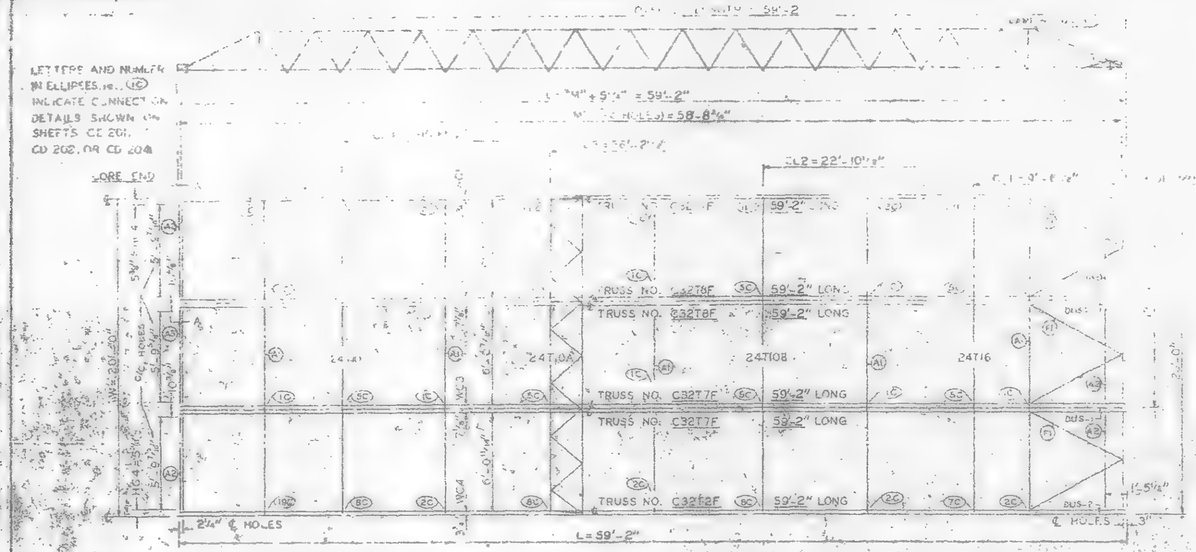
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)

PANEL DIE "D" x 59'-3"

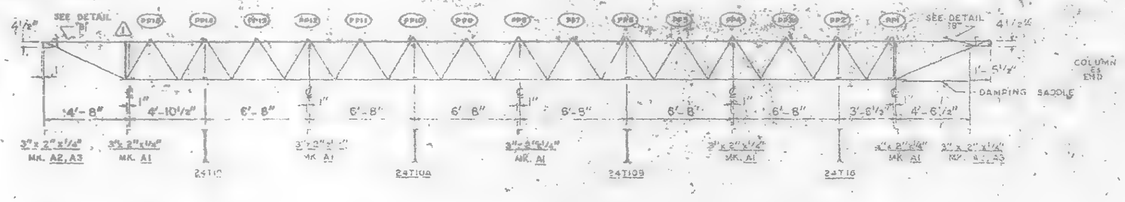
FABRICATION BY LACLEDE STEEL COMPANY

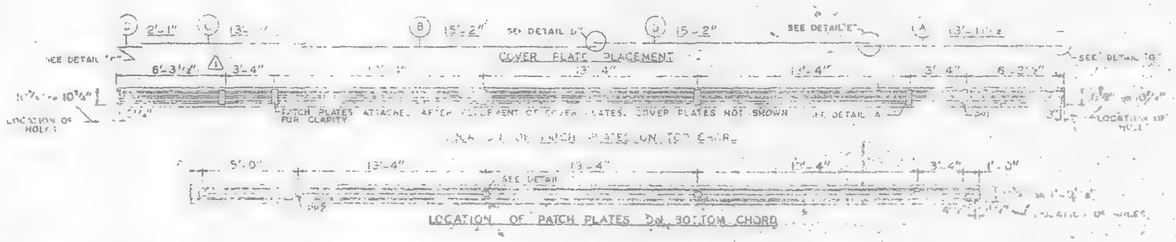
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7 AB3-9 4-15-68	PLATE
APPROVED FOR FABRICATION BY James Wolfenbarger	DATE 1/2/70	DRAWN BY g.d.c DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.N.CHURA DATE JULY 22, 1968	IN CHARGE OF DRGS. DEV.
DETAILED BY A. CARL WEBER		FABRICATION CONT NO W.T.L. 221	SHEET NO FP DIE

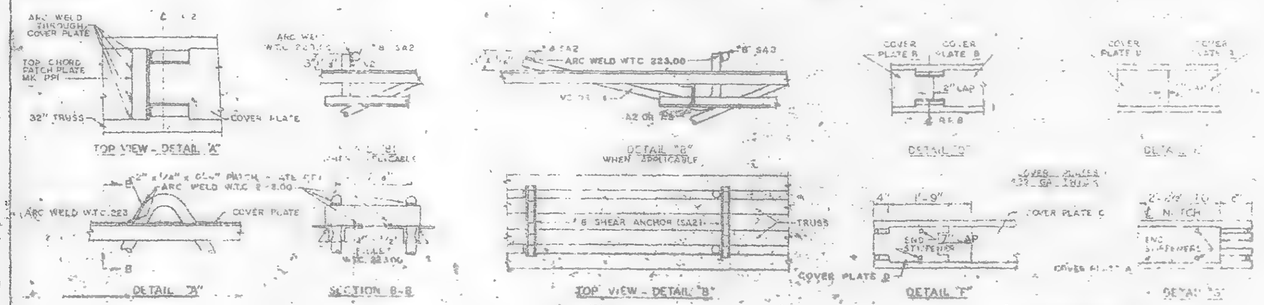


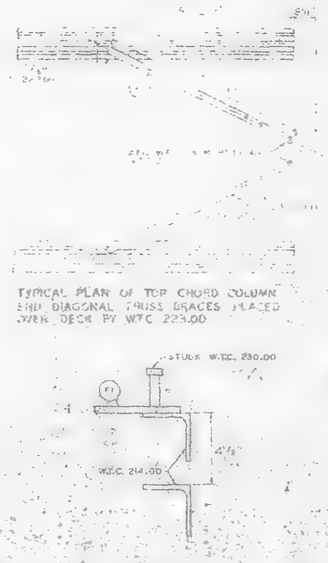
℄ ℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1F SIZE 20' x 59'-2"









TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

COVER PLATES	B	1	1'-4" x 2'-8" x 1'-8"	ST 36.8
	C	1	0'-8" x 0'-3" x 15'-2"	ST 303
	D	1	0'-8" x 0'-3" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2"x4"x½" 2'-4" x 0'-6"	ST 400
#8 SHEAR ANCHORS	SA1	9	8" H REBAR - 0'-9"	ST 400
DAMPING SADDLE	DS1	2	3'-0" x 3'-0" x 3'-0"	ST 285
	DS2	2	3'-0" x 2'-2" x 3'-0"	ST 285
CONNECTION BAR	CB1	4	1" x 8" x 1'-3"	ST 400
	CB2	2	½" x 0'-10"	ST 400
CONNECTION PLATES	P1	1	3'-0" x 2'-4" x 0'-1"	ST 400
	P2	1	4'-2" x 2'-6" x 0'-9"	ST 400
	P3	4	½" x 1'-0" x 1'-0"	ST 400
	P4	3	½" x 1'-0" x 0'-8"	ST 400
	P8	1	½" x 1'-0" x 0'-8"	ST 400

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ½" x 1" FULL THROAT FILLET.

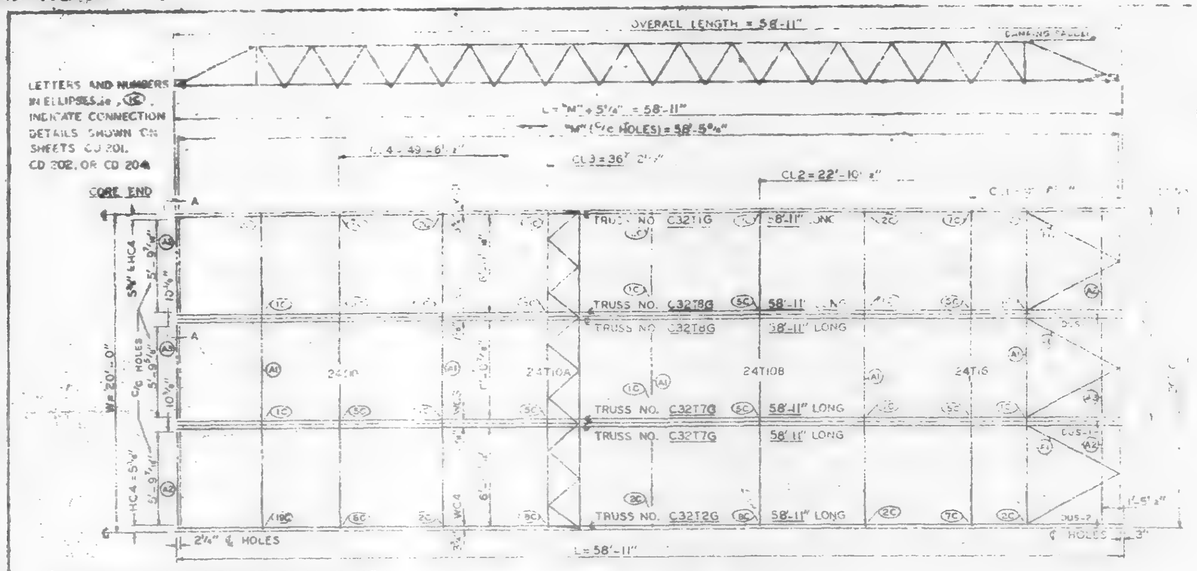
NO	DATE	REVISION	BY
1	6-10-69	AS NOTED	G.D.C

P.A. DRAWING: 1-482-5 & 1' 7-22-68; 482-6 10-15-68; 7-A2.6 ½" 1-6-69; 7-484-15,16 & 30, 7-22-68; 7 A94-42 & 3 10-15-68; 4"=124 1-6-69; 1"=1-2,3 & 4 7-22-68; 1"=1-5 10-15-68

FLOOR PANELS
FOR
WORLD TRADE CENTER
OF
THE PORT OF NEW YORK AUTHORITY

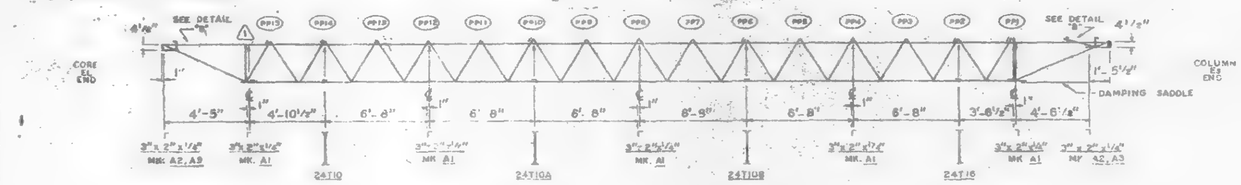
BLDG. 1 FLOORS 47-48, 70-71 (N)
PANEL DIF SIZE 20'-2" x 59'-2"
BLDG. 2 FLOORS 47-48, 70-71 (WEST) ⚠

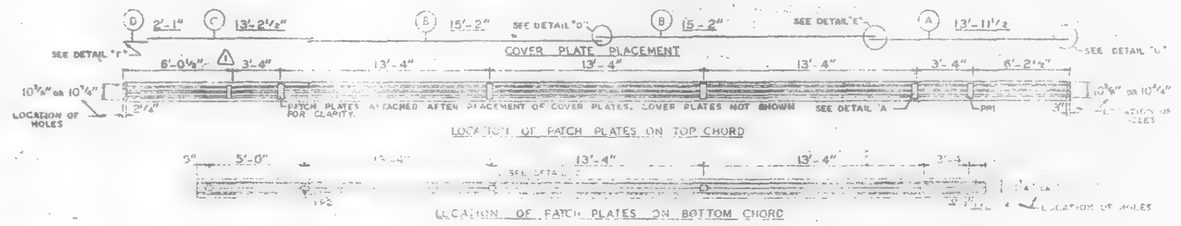
FABRICATED AT MADISON, ILLINOIS		DES. DR. DRAWING NO. 483-0	PLATE
APPROVED FOR FABRICATION BY James Wright	DATE 10/2/68	DETAILED BY gdc DATE OCT. 25, 1968	
APPROVED FOR FABRICATION BY [redacted] FOR FABRICATOR	DATE	CHECKED BY THOMPSON DATE OCT. 24, 1968	ERECTION DIV.
DETAILED BY [redacted]		FABRICATION CONT. NO. WTC 7921	SHEET NO. 1 TOP DIF

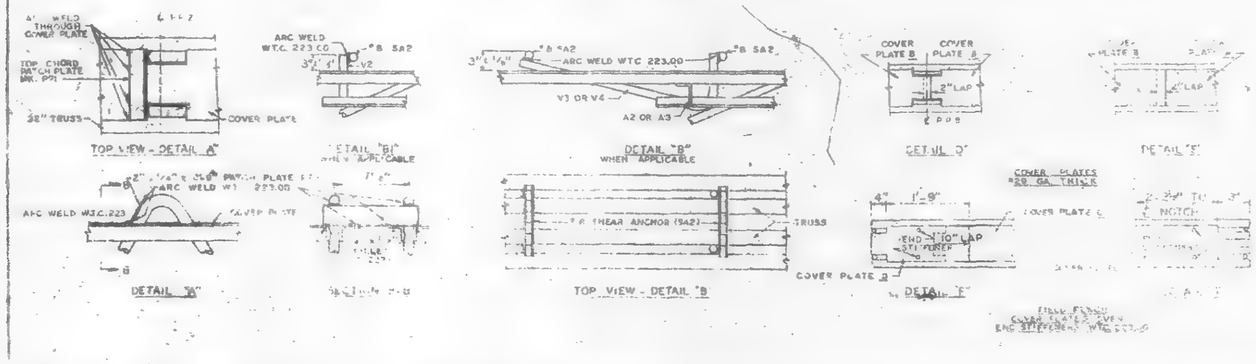


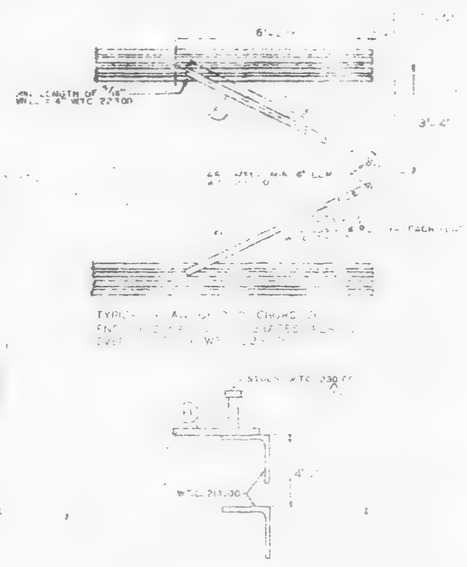
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

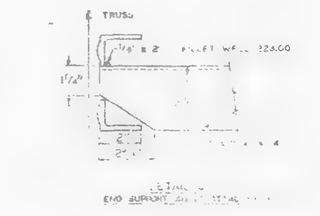
PANEL NO. D1G SIZE 20' x 58'-11"











NO	DATE	REVISION	BY
1	6-10-69	AS NOTED	GDC

1-6-69

BLDG. A FLOORS 39-40 (N & S)

BLDG. B FLOORS 39-40 (EAST & WEST) 1

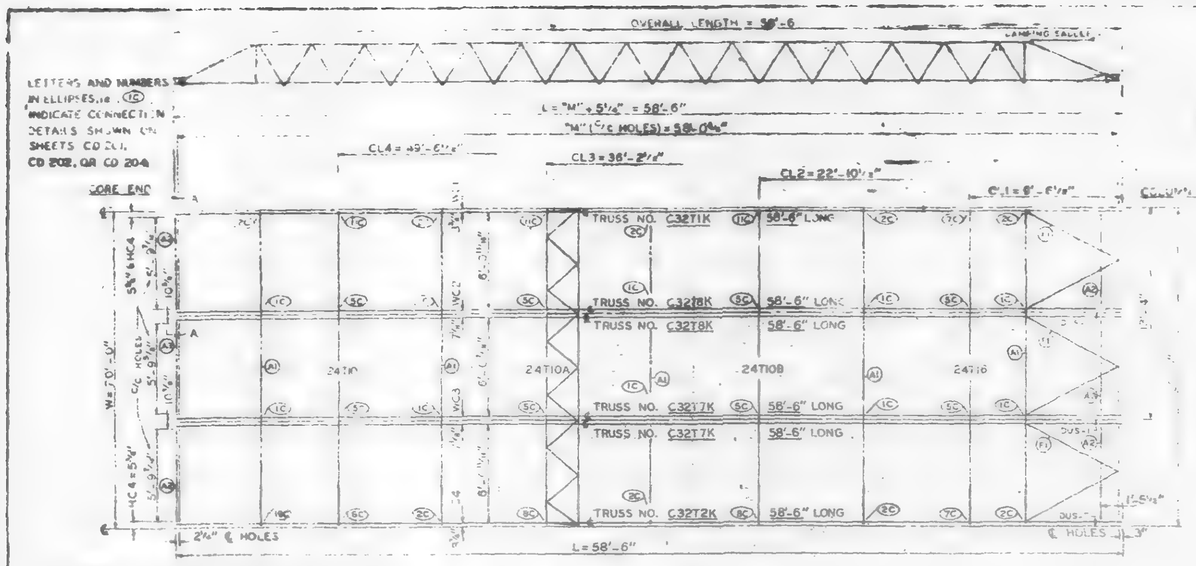
FABRICATED AT MAC

APPROVED FOR FABRICATION BY James White DATE 1/2/70

DETAILED BY CAMC

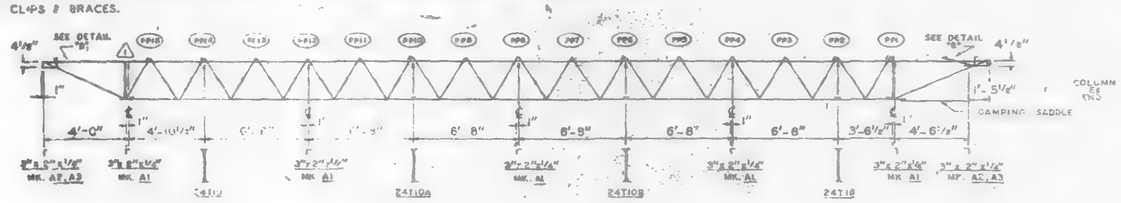
CHECKED AT TM CHGO. IN CHARGE OF ENGG. DEPT.

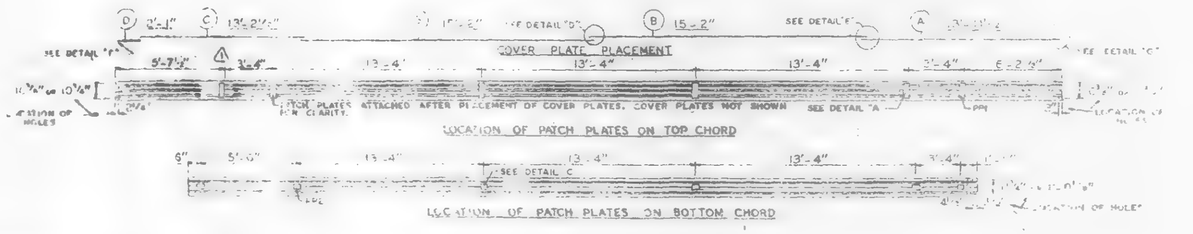
DATE 1-6-69

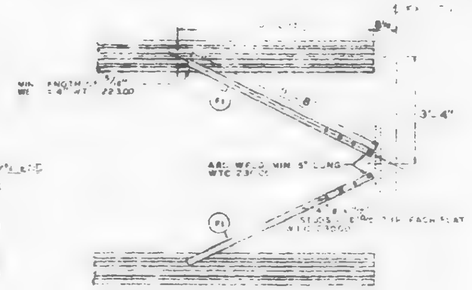


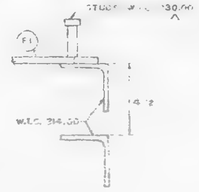
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1K SIZE 20' x 58'-6"

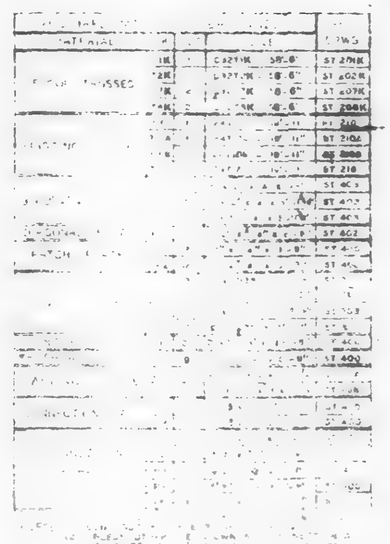


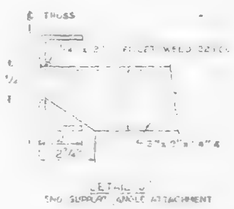


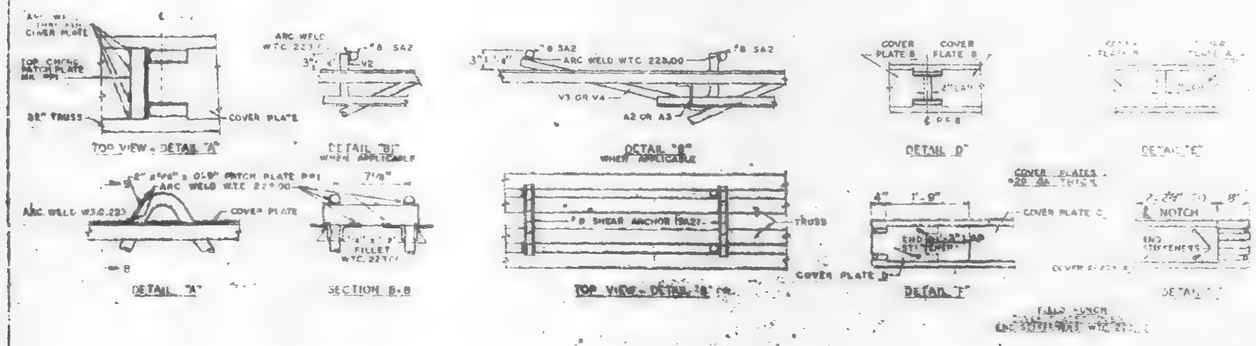




CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/4" ABOVE COLUMN CLIPS FOR TRUSS BEARING.







NO	DATE	REVISION	BY
1	6-10-69	AS NOTED	GAC

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46 (N)

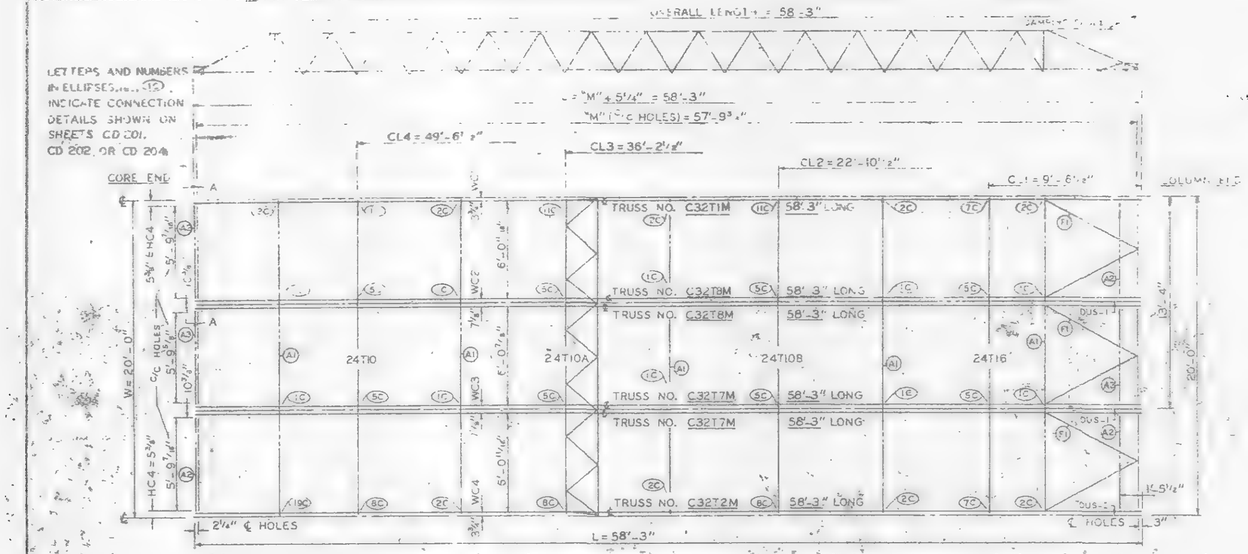
BLDG. B FLOORS 46 (WEST)

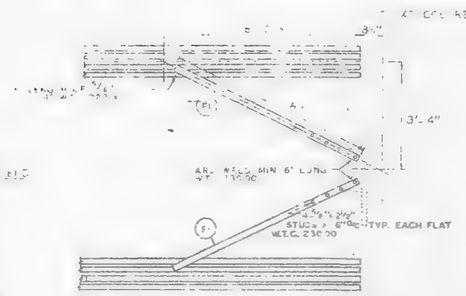
FABRICATED BY LACLEDE STEEL COMPANY AT MADISON, ILLINOIS

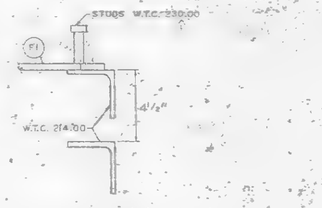
DESIGN DRAWING NO. 7-4847

LACLEDE STEEL CO.

SHEET NO. FR-D1K

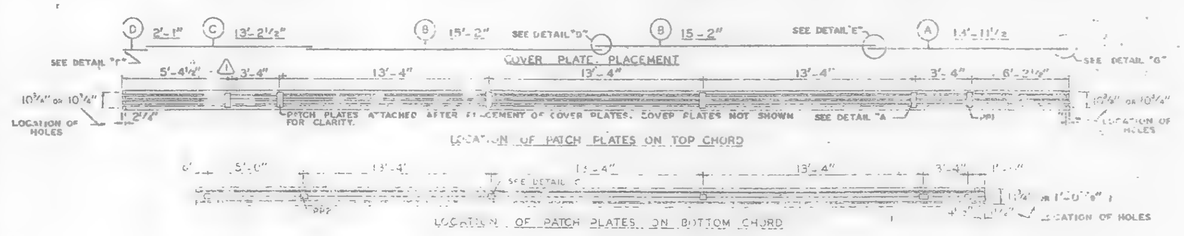


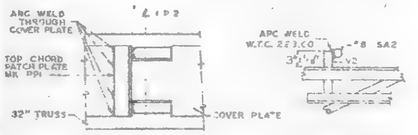


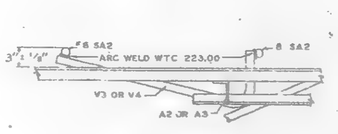


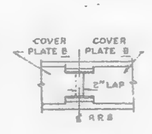
FLOOR PANELS	T1M	1	24T1M - 58'-3"	ST 201M
	T2M	1	24T2M - 58'-3"	ST 202M
	T7M	2	24T7M - 58'-3"	ST 207M
	T8M	2	24T8M - 58'-3"	ST 208M
BRIDGING TRUSSES	24T0	1	24T0 - 9'-6"	ST 210
	24T0A	1	24T0A - 9'-6"	ST 210A
	24T0B	1	24T0B - 9'-6"	ST 210B
	24T16	1	24T16 - 9'-6"	ST 216
3"x 2"x¼" ANGLE	A1	6	3"x 2"x¼" x 5'-11⅝"	ST 403
	A2	6	3"x 2"x¼" x 5'-11⅝"	ST 403
	A3	6	3"x 2"x¼" x 5'-11⅝"	ST 403
DIAGONAL FLATS	F1	4	1'-2"+ x 3⅞" x 6'-5"	ST 402
PATCH PLATES	PP1	18	2'-2" x 7⅛" x 11'-8"	ST 410
	PP2	18	2'-2" x 8" x 0'-3"	ST 411
COVER PLATES	A	3	8"x .0135" x 13'-10½"	ST 303
	B	6	8"x .0135" x 15'-2"	ST 303
	C	3	8"x .0135" x 13'-2½"	ST 303
	D	3	8"x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2½"x 4½" x 1'-6"	ST 400
⅝ SHEAR ANCHOR	SA2	96	⅝ REPAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3½" x 3½" x 3'-6"	ST 298
	DUS-2	1	3½" x 3½" x 3'-6"	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
	CB4	2	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3½" x 5" x 6'-8"	ST 400
	P2	1	4½" x .39" x 0'-0"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400
	P4	3	6½" x 7½" x 0'-8"	ST 400
	P6	1	4½" x .39" x 0'-9"	ST 401

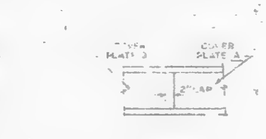
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

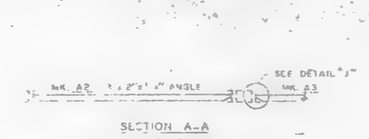


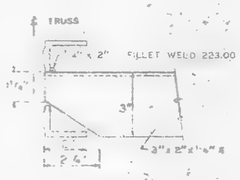












NO.	DATE	REVISION	BY
1	6-10-69	AS NOTED	G.D.C.

REF. DRWG.

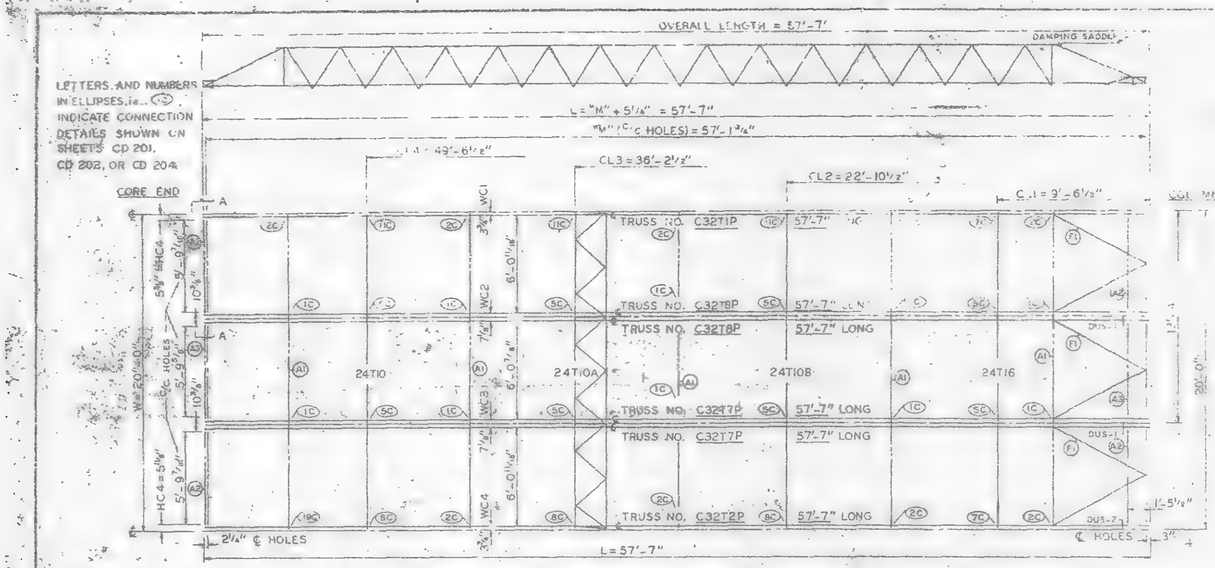
7-A02-5 & 11	7-22-68
7-A03-	10-15-68
7-A04- 1	1-2-68
7-A04-15,16 & 30	7-22-68
7-A04-42 & 3	10-15-68
SC-124	1-6-69
7-A01-2,3 & 4	7-22-68
7-A01-5	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
PANEL M 20' x 58'-3"
BLDG. B FLOORS 72-73 (WEST) 1

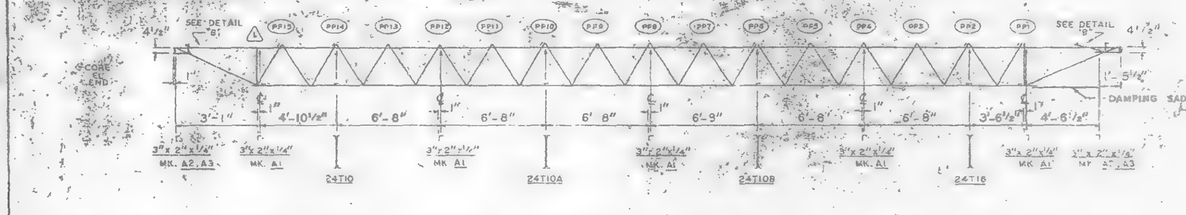
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James Whebee DATE 12/70
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
DETAILED BY DATE
DESIGN DRAWING NOS. 7-A01- 10-15-68 PATCH PLATES
DRAWN BY GDC DATE OCT 25, 1968
CHECKED BY T.M.CHUBA DATE OCT. 24, 1968
IN CHARGE OF PROJ. DEV.
FABRICATORS CONT. NO. W.T.C. 221
SHEET NO. FP 01M

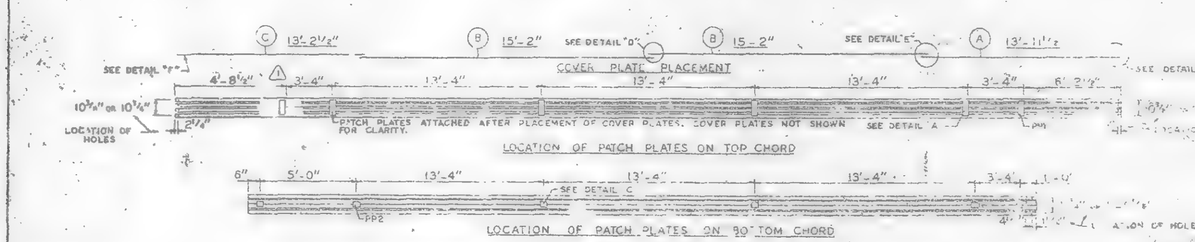
LETTERS AND NUMBERS IN ELLIPSES, ie. (2C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

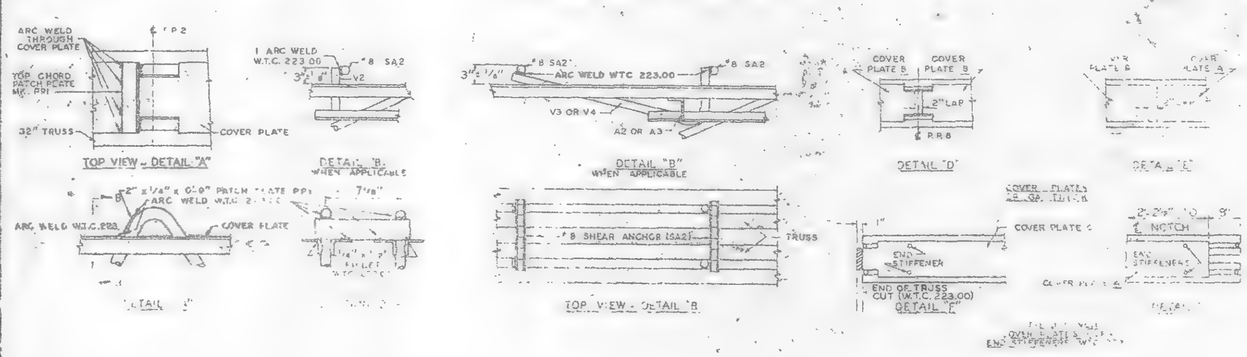


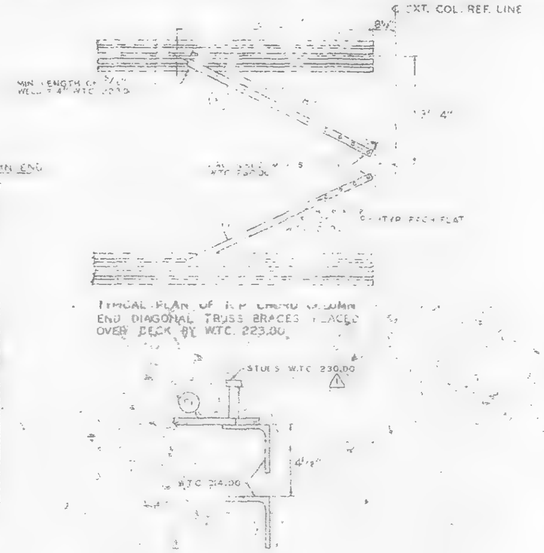
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THEIR COLUMN CLIPS & BRACES.

PANEL NO. D1P, SIZE 20' x 57'-7"

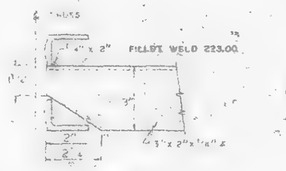








CLIP ANGLE LOCATION FOR DIAGONAL PLATES 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



MARK	NO. REQ'D	SIZE	SPEC.
			ST 410P
			ST 202P
			ST 203P
			ST 6P
			ST 204P
			ST 403
			ST 4
			ST 401
			ST 303
ANGLE CLIPS			ST 400
5/8" SHEAR ANCHOR	SA2		ST 400
EXPANSION SADDLE	DUS		ST 295
CONNECTION PLATES			ST 400
			ST 400
			ST 400
			ST 400
			ST 400
			ST 401

NOTES:
(1) USE TO BE MADE x 7" LONG HY-ERO GEN. POOS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ANG WELDS TO BE 1/4" x 1" FULL THROAT FILLET

NO	DATE	REVISION	BY
1	6-10-69	AS NOTED	G.D.C.

1 SEE DRWGS

7-A82 S & I:	7-22-68
7-A83-9	10-15-68
7-A84-21	1-3-69
7-A84-15,18 & 20	7-22-68
7-A84-22 & 3	10-15-68
SP-124	1-6-69
[illegible] P.J & 4	7-22-68
-181-2	10-15-68

OF NEW YORK AUTHORITY

74 (N)

BLDG. B FLOORS 74 (WEST) 1

James White 1/2/70

LETTERS AND NUMBERS IN ELLIPSES, e.g. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

OVERALL L = 59'-9"

DAMPING SADDLE

L = "M" x 5'-1/4" = 59'-9"

"M" C/C HOLES = 59'-3 3/4"

CL4 = 49'-6 1/2"

CL3 = 38'-8 1/2"

CL2 = 22'-10"

CL1 = 9'-6 1/2"

CORE END

COLUMN END

TRUSS NO. C32T2A 59'-9" LONG

TRUSS NO. C32T7A 59'-9" LONG

TRUSS NO. C32T8A 59'-9" LONG

TRUSS NO. C32T8A 59'-9" LONG

TRUSS NO. C32T1A 59'-9" LONG

DUS-2

DUS-1

DUS-1

24T10

24T10A

24T10B

24T18

WC1

WC2

WC3

WC4

BLC

HC4 = 5 5/8"

20'-0"

1'-5 1/2"

2 1/4" ℄ HOLES

℄ HOLLS

3"

L = 59'-9"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIA SIZE 20' x 59'-9"

SEE DETAIL "A"

SEE DETAIL "B"

CORE END

COLUMN END

DAMPING SADDLE

5'-3" 4'-10 1/8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6 1/8" 4'-6 1/8"

3"x 5" x 1/4" MK. A2, A3

3/4"x 2 1/2"x 1/4" MK. A1

24T10

3"x 2" x 1/4" MK. A1

24T10A

3"x 2" x 1/4" MK. A1

24T10B

3"x 2" x 1/4" MK. A1

24T18

3"x 2" x 1/4" MK. A1

3"x 5" x 1/4" MK. A2, A3

D 24'-1" C 13'-2 1/4" B 15'-2" SEE DETAIL "D" B 15'-2 1/4" SEE DETAIL "E" A 13'-4 1/2"

SEE DETAIL "C"

SEE DETAIL "A"

SEE DETAIL "G"

COVER PLATE PLACEMENT

3'-4" 13'-4" 13'-4" 13'-4" 3'-2" 6'-2 1/2"

10 3/4" OR 10 1/4"

LOCATION OF HOLES

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

SEE DETAIL "A"

PP1

3"

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON TOP CHORD

6" 5'-0" 13'-4" SEE DETAIL C 13'-4" 13'-4" 3'-4" 1'-0"

PP2

1 1/4" OR 1'-0 1/8"

2"

1 1/2"

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD

℄ EXT. COL. REF. LINE

6'-5 1/2"

8 1/4"

MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 22300

6"

F3

3'-4"

ARC WELD MIN 6" LONG W.T.C. 230.00

STUDS = 5/8" x 2 1/2" TYP. EACH FLAT W.T.C. 23.00

F3

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

STUDS W

F1

4 1/2"

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK NO			
FLOOR TRUSSES	T1A	1	L 3 1/2 x 3 1/2 x 5/16 x 59'-9"	ST 36
	T1A1	1	L 3 1/2 x 3 1/2 x 5/16 x 59'-9"	ST 36
	T1C	1	L 3 1/2 x 3 1/2 x 5/16 x 59'-9"	ST 36
	T1E	2	L 3 1/2 x 3 1/2 x 5/16 x 59'-9"	ST 36
BRIDGING TRUSSES	T1B	4	L 3 1/2 x 3 1/2 x 5/16 x 4'-10"	ST 36
	T1D	2	L 3 1/2 x 3 1/2 x 5/16 x 6'-8"	ST 36
	T1G	1	L 3 1/2 x 3 1/2 x 5/16 x 3'-6"	ST 36
3" x 2" x 1/4" ANG	A2	6	3" x 2" x 1/4" x 1'-0"	ST 36
DIAGONAL FLAT	F1	6	3" x 6" x 1/4"	ST 36
PATCH PLATES	PP1	18	3" x 7" x 1/4"	ST 36
	PP2	15	3" x 6" x 1/4"	ST 36
COVER PLATES	A	3	10" x 0.135" x 59'-9"	ST 303
	B	6	8" x 0.179" x 19'-2"	ST 303
	C	3	6" x 0.135" x 13'-9 1/2"	ST 303
	D	3	8" x 0.135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 2" x 3 1/2" x 0'-3"	ST 400
"B" SHEAR ANCHOR	SA2	12	"B" REBAR x 0'-2"	ST 400
DAMPING SADDLE	DUS-1	2	3" x 3 1/2" x 3'-0"	ST 200
	DUS-2	1	3" x 3 1/2" x 5'-0"	ST 200
CONNECTION BAR	CB1	4	1" x 6" x 1'-3"	ST 400
	CB4	6	1" x 6" x 0'-10"	ST 400
CONNECTION PLATES	P1	4	5" x 4 1/2" x 8 1/2"	ST 400
	P2	1	4 1/2" x 7" x 0'-8"	ST 400
	P3	1	4 1/2" x 3" x 0'-3"	ST 400
	P4	3	8" x 4 1/2" x 1'-2"	ST 400
	P6	1	4" x 4" x 0'-10"	ST 400

NOTES: (1) ALL IRC WELDS TO P1 MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION A-C WELDS TO BE 1/4" x 1" FULL LENGTH FILLET

TOP VIEW - DETAIL "A"

ARC WELD THROUGH COVER PLATE

TOP CHORD SPLICE PLATE MK. PP

W.F. TRUSS

COVER PLATE

ARC WELD W.T.C. 223.00

DETAIL "B" WHEN APPLICABLE

ARC WELD W.T.C. 223.00

3" x 7 1/8" x 1/4" PATCH PLATE PP1

ARC WELD W.T.C. 223.00

COVER PLATE

B

DETAIL "A"

7 1/4"

1/4" x 1 1/2" FILLET W.T.C. 223.00

SECTION B-B

ARC WELD W.T.C. 223.00

"B" SA2

3" x 7 1/8"

V2

3" x 7 1/8"

"B" SA2

ARC WELD W.T.C. 223.00

V3 OR V4

A2 OR A3

DETAIL "B" WHEN APPLICABLE

"B" SHEAR ANCHOR (SA2)

TRUSS

COVER PLATE D

TOP VIEW - DETAIL "B"

COVER PLATE B COVER PLATE B

2" LAP

℄ PP2 B

DETAIL "D"

COVER PLATE B COVER PLATE A

2" LAP

DETAIL "E"

COVER PLATES 3/8" THICK

4" 5'-9"

COVER PLATE C

END STIFFENER

DETAIL "F"

2" 2 1/4" TO 8" ℄ NOTCH

END STIFFENERS

COVER PLATE A

DETAIL "G"

FIELD PUNCH COVER PLATES & END STIFFENERS W.T.A. 223.00

MK. A2 3" x 2" x 1/4" ANGLE

SEE DETAIL "J" MK. A3

SECTION A-A END SUPPORT ANGLE

7 1/8"

C

3"

ARC WELD W.T.C. 223.00 FULL BEACH SIDE

DETAIL "C"

ARC WELD W.T.C. 223.00

3"

3" x 7 1/8" x 4" PATCH PLATE MK. PP2

SECTION C-C

W.F. TRUSS

2" x 2" FILLET WELD 223.00

1 1/4"

2"

2 1/4"

3"

1/4"

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY
1	6-17-69	AS NOTED	GDC

REF. DRWGS.

1	ARR-5.4.1	7-22-68	
2	C53-10	10-15-68	
3	A84-31	1-3-2-69	
4	A84-15 & 5.30	7-22-68	
5	AC44, 44.5.3	10-15-68	
6	SA-1.84	1-8-69	
7	A491-2, 3.6.4	7-22-68	
8	A01-	10-15-68	

FLOOR PANEL DETAILS

FOR

WORLD TRADE CENTER - N.Y.C.

FOR

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) AS SHOWN ON DRWG. A-66 & 68-69 (NORTH) AND DRWG. A-67 & 68-69 (SOUTH)

BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-58, 60-69 (WEST) 1

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY [redacted] FOR F.P.A. DATE 12/12

APPROVED FOR FABRICATION BY [redacted] FOR FABRICATOR DATE

DETAILED BY [redacted] CHECKED BY [redacted]

DESIGN DRAWING NO. A-201-10

DRAWN BY [redacted] DATE

CHECKED BY [redacted] DATE JULY 22, 1968

FABRICATION CONT. NO. W.T.C. 221

SCALE

IN CHARGE OF DESIGN

SHEET NO. FP DRIA

LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CONTIN. CD 202, CD 203 CD 204.

CORE END

OVERALL LENGTH = 60'-8 1/2"

DAMPING SADDLE

L = "M" x 5 1/4" = 59'-8 1/2"

"M" @ c/c HOLES = 56 - 3 1/4"

CL = 36'-2 1/2"

CL = 8'-6 1/2"

COLUMN END

TRUSS NO. C32T2B

TRUSS NO. C32T7B

TRUSS NO. C32T8B

TRUSS NO. C32T1B

59'-8 1/4" LONG

DUS-2

24T10

24T10A

24T10B

24T16

2 1/4" ø HOLES

ø HOLES @ 3"

L = 59'-8 1/2"

℄ & DIMENSION HC-1 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D/4B SIZE 20' x 59'-8 1/2"

SEE DETAIL "A"

SEE DETAIL "B"

5'-2 1/2" | 4'-10 1/4" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 4'-6 1/2"

MK. A2, A3 | MK. A1 | MK. A1 | MK. A1 | MK. A1 | MK. A1 | MK. A1 | MK. A2, A3

24T10 | 24T10A | 24T10B | 24T16

SEE DETAIL "F" | SEE DETAIL "G" | SEE DETAIL "C" | SEE DETAIL "B" | SEE DETAIL "A"

COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES IN BOTTOM CHORD

TOP VIEW - DETAIL "A"

DETAIL "B" WHEN APPLICABLE

DETAIL "B" WHEN APPLICABLE

DETAIL "D"

DETAIL "E"

DETAIL "A"

SECTION B-B

TOP VIEW - DETAIL "B"

DETAIL "F"

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 22300

℄ EXT COLUMN LINE

TYP. EACH FLAT

END DIAGONAL WEB BRACES WELDED WITH DETAIL "A" W.T.C. 22100

BRACE LOCATION NO. DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

	1B	1B	8 1/2"	B	
	B	B	6 1/2"	B	
	7B	B	8 1/2"	B	
	B	B	8 1/2"	B	

PLATES

ANGLES	L1	2	3 1/2 x 3 1/2 x 5/16	0'-6"	2	3.8	400
	L2	2	3 1/2 x 3 1/2 x 5/16	0'-6"	2	3.8	400
BRACING TAUC		2				3.8	38
GUSSET PLATES	G1	4	8 x 1/2	1'-5"	54	30.4	400
	G2	4	8 x 1/2	1'-5"	54	30.4	400
BRACING RODS	R1	4	6 1/2" x 5/8"	1'-5"	54	30.4	400
	R2	4	6 1/2" x 5/8"	1'-5"	54	30.4	400
CLIPS	C1	4	4 x 4 x 1/2	1'-0"	2	4.3	400
	C2	4	4 x 4 x 1/2	1'-0"	2	4.3	400

NOTES: 1. GEN PURP WELDING TO BE PERFORMED BY A CERTIFIED WELDER WITH A MINIMUM QUALIFICATION OF AWS E70 SERIES ELECTRODE.
2. UNLESS OTHERWISE SHOWN ALL CONNECTIONS ARE WELDED TO BE 3/16" x 1" FULL THROAT INCREMENTAL.

END SUPPORT ANGLE

SECTION A-A

DETAIL "C"

SECTION C-C

NO	DATE	REVISION	BY
1	6-17-69	AS NOTED	G.D.C.

REF. DRWGS.

7-A2P 5 & 1	7-22-68
7-A3P-10	10-10-68
7-A2P-4 & 5	10-15-68
7-A1P-4, 15 & 39	7-22-68
7-A2P-6, 7	10-15-68
5211P-4	1-6-69
7-A61-2	7-22-68
7-A61-3,4	7-22-68
7-A61-5	10-15-68

BLDG. B FLOORS 84-91, 93-106 (WEST)

SECTIONS 84-91, 93-106(N).

LAB >>> 59'-8 1/2"

APPROVED: James Lashlee 1/2/70

OCT. 31, 1968

D 3N1B

PANEL NO. DRIC SIZE 20' x 59'-8"

* DIMENSION HC4 ARE RELATED TO HOLES PUT IN ANGLES END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄'S ON COLUMN CLIPS & BRACES.

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC. 223.00

NO.	DATE	REVISION	BY
6	6-17-69	AS NOTED	GDC

1-ABP-5 & 6	7-22-68
1-AB2-10	10-15-68
1-AB2-1 & 42	10-15-68
1-AB2-15, 16 & 39	7-22-68
1-AB2-3	1-3-69
1-AB1-42	6-6-68
1-AB1-1	7-22-68
1-AB1-2,4	7-22-68
1-AB1-5	10-15-68

50-58, 60-66, 68-74, 80-91, 93-106 (S)

BLDG. B FLOORS 50-58, 60-74, 80-91, 93-106 (EAST)

James White 11/2/70

OCT. 31, 1968

MARK NUMBERS
SPLICE CONNECTION
DETAILS SHOWN ON
SHEETS CD 201,
CD 202, OR CD 203

CRANE END

DAMPING SADDLE

L = "M" + 5½" = 57'-7"

"M" = HOLES = 57'-1½"

CL4 = 49'-6½"

CL3 = 34'-2⅛"

CL2 = 22'-10¼"

CL1 = 9'-6½"

COLUMN LINE

TRUSS NO. C3217P 57'-7" LONG

TRUSS NO. C3217P 57'-7" LONG

TRUSS NO. C3217P 57'-7" LONG

TRUSS NO. C3217P 57'-7" LONG

TRUSS NO. C3217P 57'-7" LONG

DUS-2

DUS-1

24TIOA

24TIOB

24TIOB

24TIOA

WC1

WC2

WC3

3½"

6'-0"

6'-0"

10'-0"

230'-0"

13'

15½"

3"

℄ HOLES

℄ HOLES

L = 57'-7"

* DIMENSION NO.1 ARE RELATED TO HOLES PUT IN EACH END OF FLOOR TRUSSES WHICH ARE SIMILAR TO, BUT NOT EXACTLY ASSIGNED WITH HOLE "1" ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIP SIZE 20'-0" x 57'-7"

SEE DETAIL "F"

CRANE END

DAMPING SADDLE

COLUMN SEE DWG

3'-1" 4'-10¹⁵⁄₁₆" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6½" 4'-0½"

PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1

MK. A2, A3 MK. A1 MK. A1 MK. A1 MK. A1 MK. A2, A3

24TIO 24TIO6 24TIO6 24TIO

SEE DETAIL "D"

SEE DETAIL "C"

SEE DETAIL "A"

13'-2⅞" 15'-2" 13'-11½"

DETAIL "F"

4'-8½" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2½"

COVER PLATE PLACEMENT

SEE DETAIL "G"

PATCH PLATES ATTACHED AFTER PLACEMENT OF OTHER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

SEE DETAIL "A"

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON TOP CHORD

6" 5'-9" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

℄ DRIP

PP6

1¼" OR 1'-0"

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD

C.L. COLUMN LINE

B = 2'-1⅝"

MIN. LENGTH WELD 4" @ 223.00

F1

TYP EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES FLAGED OVER DECK BY WTC. 223.08.

STUDS WTC 23.00

WTC

CLIP ANGLE LOCATION FOR DIAGONAL STATE 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MARK	QTY.	SIZE	FINISH
FLOOR TRUSSES	1P	C3217P	ST WSP
	1P	C3217P 7-7	ST DrP
	1P	C3217P 7-7	ST 20DP
	1P	C3217P 57-7	ST TP
	2P	C3217P 57-7	ST 20DP
	1C	24TIO	ST TIO
	1A1	24TIOA	ST 2-0A
	1A	24TIOA	ST 08
	1B	24TIOB	ST 16
COVER PLATES	B	4	ST 403
	C	3	ST 403
ANGLE CLIPS	C1	26	ST 400
*8 SHEAR ANCHOR	SA2	0	ST 400
CAMBERING SADDLE	CDS-1	2	ST 208
	CDS-2	1	ST 208
CONNECTION BAR	CB1	4	ST 400
	CB2	6	ST 400
CONNECTION PLATES	P1	4	ST 400
	P2	1	ST 400
	P3	1	ST 400
	P4	3	ST 400
	P6	1	ST 400

NOTES: 1) ALL SHOP WELDS TO BE MADE WITH LOW HYDROGEN ROOP IN THE E-70 SERIES OR EQUAL.
2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⁵⁄₁₆" x 1" FULL THROAT FILLET

NO.	DATE	REVISION	BY
1	5-17-65	AS NOTED	D.D.C.

REF. DRWGS.

7-A82-5 & 11	7-22-68
7-A83-10	10-14-68
7-A84-3 & 42	10-15-68
7-A85-17, 18 & 39	7-22-68
7-A86-3 & 41	1-3-
7-A87-124	1-6-69
7-A81-2	7-22-68
7-A81-3 & 4	7-22-68
7-A81-5	10-14-68

ARC WELD WTC 223.00

TOP CHORD PATCH PLATE

COVER PLATE

DETAIL "A"

TOP VIEW

ARC WELD WTC 223.00

⅜" PATCH PLATE PP1 WTC 223.00

FILLET WTC 223.00

DETAIL "A"

SECTION B-B

ARC WELD WTC 223.00

*8 SA2

DETAIL "B" WHEN APPLICABLE

*8 SA2

ARC WELD WTC 223.00

V3 OR V4

A2 OR A3

DETAIL "B" WHEN APPLICABLE

*8 SHEAR ANCHOR (SA2)

TOP VIEW DETAIL "B"

COVER PLATE B

COVER PLATE C

½" LAP

DETAIL "D"

COVER PLATE B

COVER PLATE C

2" LAP

DETAIL "E"

COVER PLATES #20 OR THICKER

2" ID 8" NOTCH

END STIFFENER

END OF TRUSS CUT (W.T.C. 223.00) DETAIL "E"

COVER PLATE C

COVER PLATE B

END STIFFENER

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

DETAIL "G"

MK. A2 3 x 3" x ¼" ANGLE

SEE DETAIL "A" MK. A2

SECTION A-A

END SUPPORT ANGLE

ARC WELD WTC 223.00 ¼" x 3" EACH SIDE

DETAIL "F"

ARC WELD WTC 223.00

3"

PATCH PLATE MK. PP 2

SECTION C-C

TRUSS

⅜" x 2" FILLET WELD WTC 223.00

2½"

DETAIL

END SUPPORT ANGLE ATTACHMENT

FLOOR PANEL DETAILS

FOR

ARMY TERMINAL CENTER - NEW YORK

FOR

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 74 (N) PANEL 2 x 57.7

BLDG. B FLOORS 74 (WEST)

FABRICATION BY AMERICAN BRIDGE COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-A87-2

APPROVED BY James Winter DATE 1/2/70

DRAWN BY [illegible] DATE [illegible]

APPROVED FOR FABRICATION BY [illegible] DATE [illegible]

CHECKED BY ENGINEERING DATE OCT. 31, 1968

DESIGNATION CONT. SHT. [illegible]

LETTERS AND NUMBERS IN CIRCLES IE. (A2) INDICATE CONNECTION DETAILS SHOWN ON SHEETS C2 201, C2 202, OR C2 204.

OVERALL LENGTH

L = "M" - 5¼" = 58'-3"

CL4 = 29'-8½"

CL3 = 36'-2½"

CL2 = 22'-10½"

CL1 = 9'-6½"

CORE END

TRUSS NO. C3217M 58'-3" LONG

TRUSS NO. C3217M 58'-3" LONG

TRUSS NO. C3217M 58'-3" LONG

TRUSS NO. C3217M 58'-3" LONG

24T10

24T10A

24T10B

24T16

CUS-2

CUS-1

2¼" ℄ HOLES

℄ HOLES 3"

L=58'-3"

℄ & DIMENSION ROWS ARE LOCATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIM SIZE 20' x 58'-3"

SEE DETAIL

DAMPING SADDLE

3'-5" 4'-10½" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6½" 4'-6½"

MK A2, A3 MK A1 MK B1 MK B MK A2 MK A1 MK A2, A3

COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES, COVER PLATES NOT SHOWN FOR CLARITY

SEE DETAIL "A"

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

LOCATION OF HOLES

TOP VIEW - DETAIL "A"

DETAIL "B"

SECTION B-B

TOP VIEW - DETAIL "B"

DETAIL "D"

DETAIL "E"

DETAIL "F"

DETAIL "G"

SECTION C-C

℄ EXT COL. REF LINE

TYP EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES. BRACES OVER DECK BY WTC 22300

STUB WTC 23000

WTC 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4¼" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MK							
							THWD
	M		M	8 3		5	2 M
	M		M	8 3		5	M
	M		M	8 3		5	M
	M		M	8 3		5	M

LETTERS & NUMBERS IN ELLIPSES (○) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD12B, CD12C, OR CD20A

TOP END

OVERALL LENGTH = 58'-6"

DAMPING SADDLE

L = "H" = 5'-1" = 58'-6"

"W" (C to C HOLES) = 54'-0"

L1 = 6'-1"

CL3 = 86'-2½"

L2 = 22'-10½"

CL1 = 3'-6½"

COLUMN END

TRUSS NO. C3217K 58'-6" LONG

TRUSS NO. C3217K 58'-6" LONG

TRUSS NO. C3217K 58'-6" LONG

TRUSS NO. C3217K 58'-6" LONG

DUS-2

DUS-1

DBS-1

24T1D

24T1DE

24T1E

13'-4"

1'-5½"

2¼" ℄ HOLES

℄ HOLES

3"

L = 58'-6"

ALL & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING CHORD FIBER TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES

PANEL NO. D81K SIZE 20' x 58'-6"

SEE DETAIL "B"

SEE DETAIL "A"

DAMPING SADDLE

4'-0" | 4'-10½" | 6'-8" | 6'-8" | 6'-8" | 6'-6" | 6'-6" | 6'-8" | 3'-6½" | 4'-6½"

8" x 2" x ¼" MK. A2, A3

MK. A1

2 ATTD

MK. A1

2 ATTD

MK. A1

2 ATTD

MK. A1

MK. A2, A3

2 ATTD

2'-1" | 13'-2½" | 13'-2" | 13'-2" | 13'-11½"

SEE DETAIL "D"

SEE DETAIL "C"

SEE DETAIL "C"

SEE DETAIL "D"

COVER PLATE PLACEMENT

5'-7⅛" | 3'-4" | 13'-4" | 13'-4" | 3'-4" | 6'-2½"

10½" OR 10½"

LOCATION OF HOLES

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN. SEE DETAIL "A"

PP1

PP2

LOCATION OF HOLES

ELEVATION OF PATCH PLATES ON TOP CHORD

6" | 5'-0" | 13'-4" | 13'-4" | 3'-4" | 1'-0"

SEE DETAIL

PP2

11¾" OR 1'-0¼"

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD

TOP CHORD SPLICE PLATE

32° TRUSS

COVER PLATE

ARC WELD W.T.C. 223.00

⅜ SA2

TOP VIEW - DETAIL "A"

DETAIL "B" WHEN APPLICABLE

2" x 6'-0" PATCH PLATE PP1

ARC WELD W.T.C. 223.00

COVER PLATE

FILLET W.T.C. 223.00

7¼"

DETAIL "B"

SECTION B-B

¾ SA2

ARC WELD W.T.C. 223.00

⅜ OR ½

½ OR ⅝

SHEAR ANCHOR (SA2)

COVER PLATE

TOP VIEW - DETAIL "B"

COVER PLATE B

COVER PLATE A

DETAIL "D"

COVER PLATE B

COVER PLATE A

2" LAP

DETAIL "E"

COVER PLATES ½" OR ⅝" THICK

COVER PLATE B

2'-9"

2" LAP

DETAIL "F"

2'-2½" TO ℄ NOTCH

END STIFFENER

COVER PLATE B

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END SPLICE PLATES W.T.C. 223.00

TYPICAL PEAK OF TOP CHORD AT END DIAGONAL. TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

TYP. EACH FLAT

ARC WELD MIN. 6" W.T.C. 223.00

ARC WELD W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL SEATS 24½" ABOVE COLUMN CLIPS FOR TRUSS BEARINGS.

	K	1K	8 6		1K
	K	1K	8 6		1K
	7K	K	8 6		7K
	K	K	8 6		20SK

COVER PLATES					
ANGLE CLIP					ST 400
N.S. SHEAR ANCHOR	SA2	9	3 M.B.R.	0'-3"	ST 400
DAMPING SADDLE	DS-2	2			ST 200
CONNECT. PLT.	CP-1	4			ST 400
CONNECTION PLATES	CP-2	5			ST 400
	P-1				ST 400
	P-2				ST 400

NOTES:
(1) ALL SHEAR STUDS TO BE WELDED WITH LOW HYDROGEN ROBS IN 7½ & 7½ STUDS OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅜" FULL THROAT FILLET

TRUSS

3" x 2" FILLET WELD W.T.C. 223.00

PLATE

2"

DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

MK. A2 3" x 2½" x ¼" ANGLE

SEE DETAIL MK. A2

SECTION K-K
END SUPPORT ANGLE

ARC WELD W.T.C. 223.00 3" EACH SIDE

DETAIL "L"

ARC WELD W.T.C. 223.00

3"

PATCH PLATE MK. PP1

SECTION L-L

NO.	DATE	REVISION	BY
1	6-17-69	AS NOTED	G.D.C.

1 REF DRWGS.

7-BB5-5 & 11	7-22-68
7-AB3-10	10-15-68
7-AB4-3 & 42	10-15-68
7-AB4-15, 16 & 39	7-22-68
1-AB4-3.1	1-3-69
SA-124	1-6-69
7-AB1-2	7-22-68
7-AB1-3.4	7-22-68
7-AB1-5	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45-46(N)

BLDG. B FLOORS 45-46 (WEST) 1

FABRICATION BY STEEL COMPANY

DESIGN DRAWING NO. AB3-10

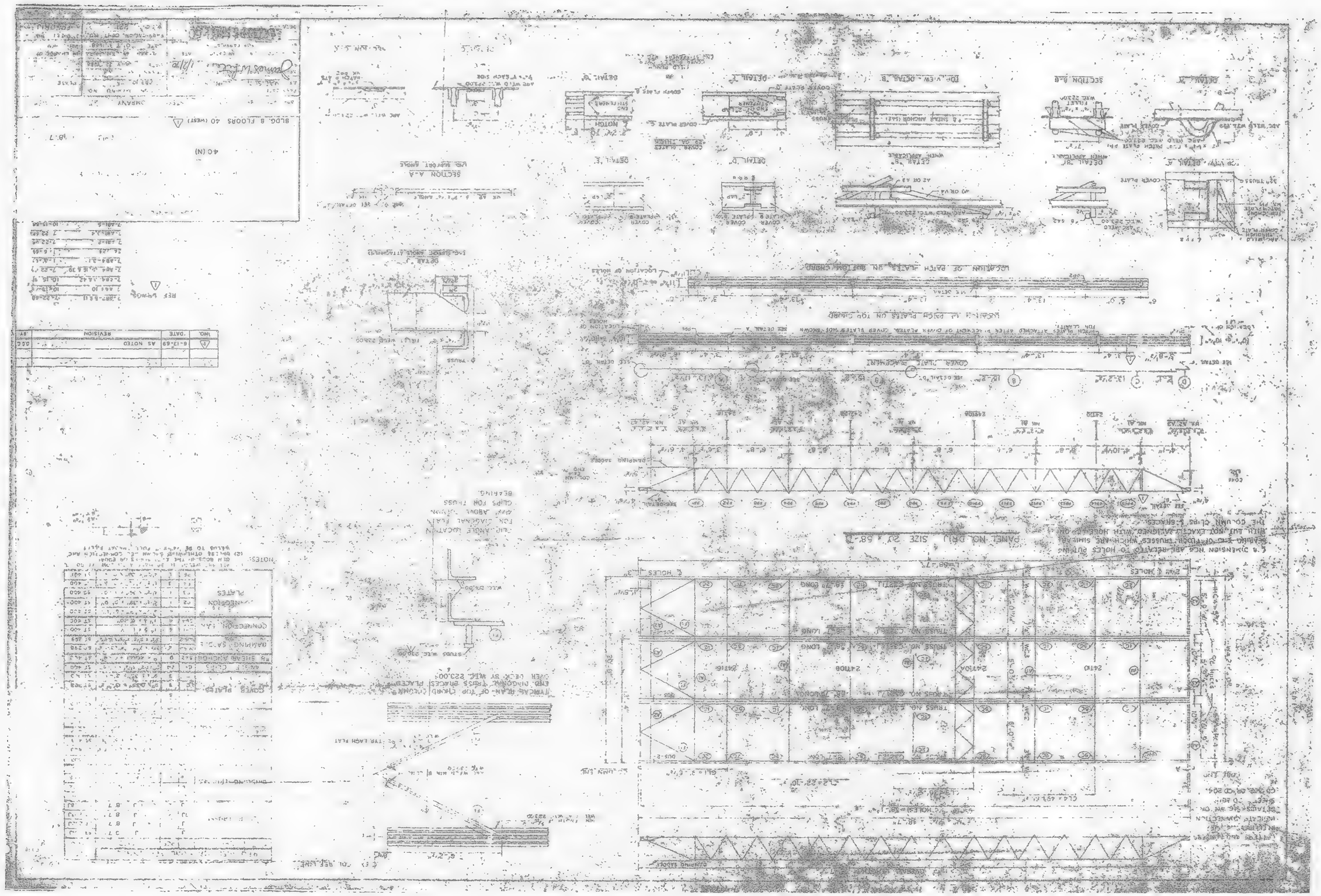
APPROVED BY MADISON

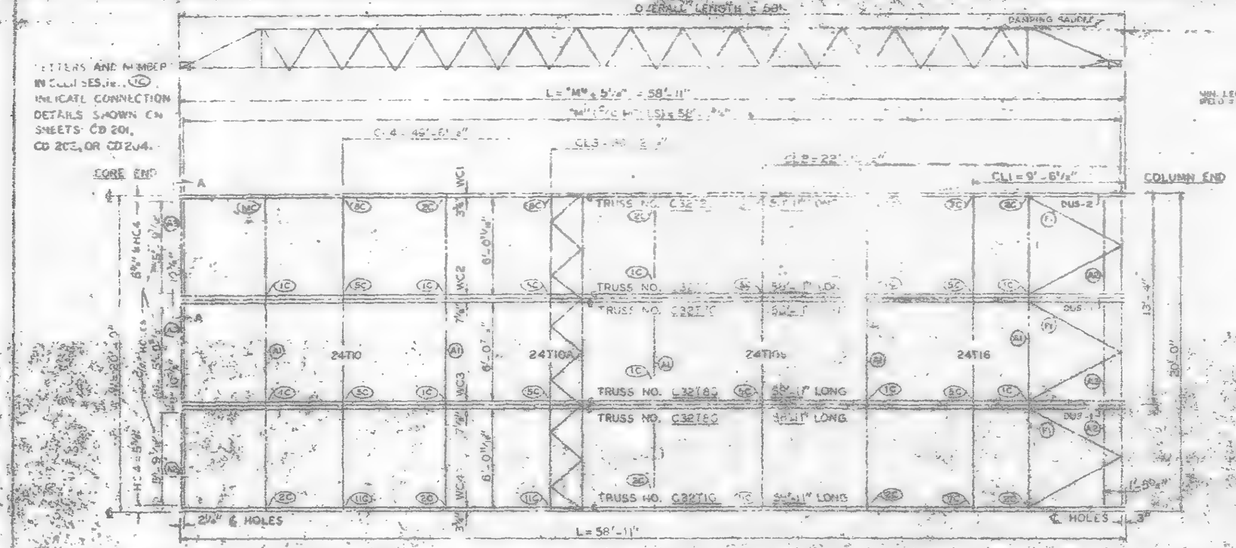
DRAWN BY [illegible] PLATE

CHECKED BY James White 12/1/70 DATE JULY 30, 1968

APPROVED FOR FABRICATION BY [illegible] DATE OCT. 31, 1968

SHEET NO. FABRICATION NO.

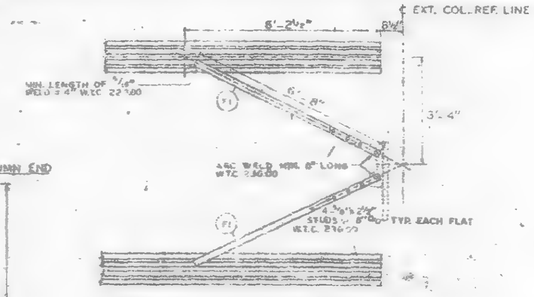




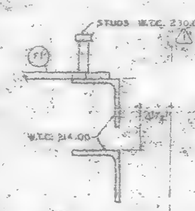
LETTERS AND NUMBERS IN CIRCLES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

"M" & "HC4" DIMENSIONS ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DR1G - SIZE 20' x 58'-11"



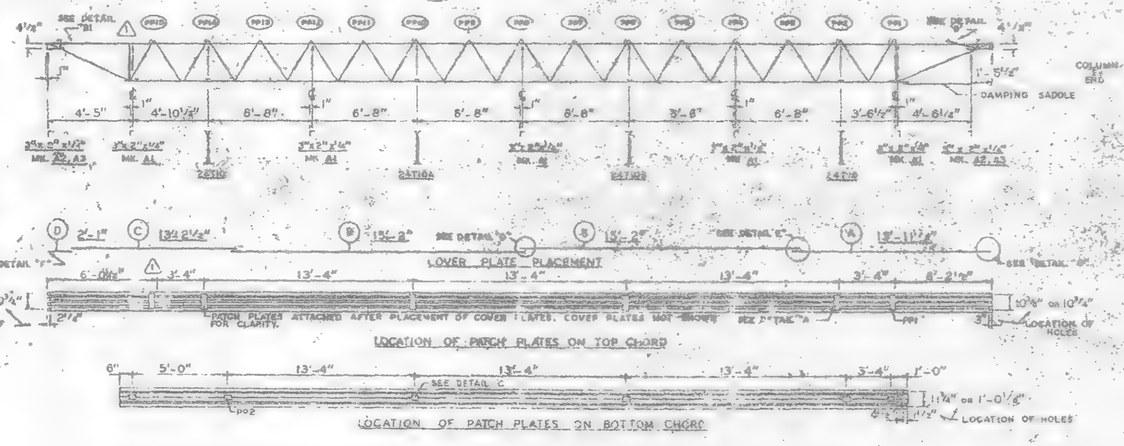
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00 ℄

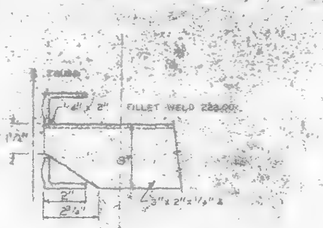


CLIP ANGLE LOCATION FOR DIAGONAL PLATE 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL FOR EACH PANEL				
MATERIAL	MK.	QTY.	SIZE	
FLOOR TRUSSES	T2C	1	C32T2	
	T6C	2	C32T6	
BRIDGING TRUSSES	T10	1	24T10	
	T10A	1	24T10A	
	T16A	1	24T16A	
	T16	1	24T16	
3"x 2"x 1/4" ANGLE	A1	5		
	A2	4		
	A3	2		
DIAGONAL PLATES	P1	8		
PATCH PLATES	PP1	18	2'-3 1/4" x 1'-2"	ST 400
	PP2	16	3" x 3/8" x [illegible]	ST 400
COVER PLATES	A	3	10" x 0.135" x [illegible]	ST 303
	B	6	9" x 0.135" x [illegible]	ST 303
	C	3	9" x 0.135" x 43-2"	ST 303
	D	3	5" x 0.135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2"x 1 1/2" x 1/4" x 0'-6"	ST 400
3/8" ø SHEAR ANCHOR	SA2	9	3/8 ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-0"	ST 298
	DUS-1	1	3 1/2" x 3 1/2" x 3/8" x 3'-0"	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
	CB4	8	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 3/8" x 8 1/2"	ST 400
	P2	1	6 1/2" x .79" x 0'-9"	ST 400
	P3	1	6 1/2" x .30" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .39" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET



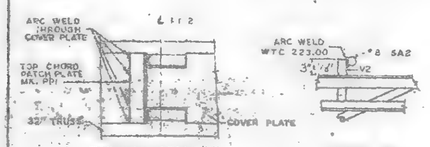


DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY
1	6-17-68	AS NOTED	G.D.C.

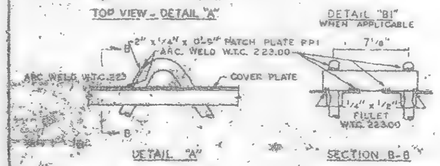
REF. DRWGS.

7-AB2-5 & 11	7-22-68
7-A7 7-10	10-15-68
7-AB4-3,4	1-3-68
7-AB4-15,16 & 38	7-22-68
7-AB4-42 & 3	10-15-68
SA-124	1-8-68
7-AB1-2,3 & 4	7-22-68
7-AB1-5	10-15-68



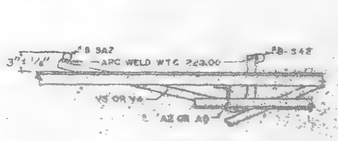
TOP VIEW - DETAIL "A"

DETAIL "B1" WHEN APPLICABLE

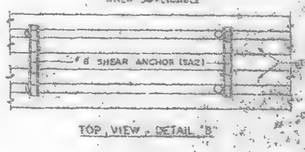


DETAIL "A"

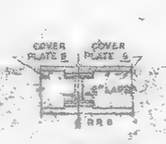
SECTION B-B



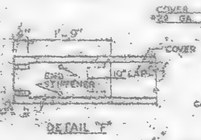
DETAIL "B" WHEN APPLICABLE



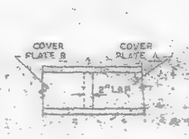
TOP VIEW - DETAIL "B"



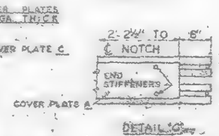
DETAIL "D"



DETAIL "F"

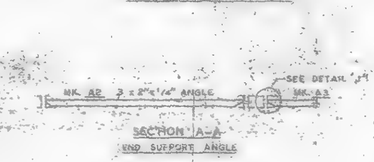


DETAIL "E"



DETAIL "C"

FIELD BUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



SECTION "A-A"
END SUPPORT ANGLE

DETAIL "C"

SECTION C-C

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11, 39 (NORTH) 39-40 (SOUTH) ⚠
PANEL DRIG - 20' x 58'-11"
BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST) ⚠

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A63-10	DATE
APPROVED FOR FABRICATION BY [illegible] FOR LACLEDE STEEL CO.	DATE 7/2/68	DRAWN BY GDC DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY M. CHUNG DATE JULY 22, 1968	IN CHARGE OF DESIGN
DETAILED BY S. CARLYLE		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP DRIG

PANEL NO. DRIF SIZE 20' x 59'-2"

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

COVER PLATES						
ANGLE CLIPS	C1					ST 400
STUD SHEAR ANCHORS	SA2					ST 400
CLAMPING SADDLE						ST 400
CONNECTING BARS						ST 400
CONNECTION PLATES						ST 400

NOTES: (1) ALL WELDS ARE 1/4" FILLET WELDS UNLESS OTHERWISE NOTED. (2) UNLESS OTHERWISE NOTED ALL CONNECTIONS ARE WELDED TO BE SHOP INSTALLED.

NO.	DATE	REVISION	BY
1	6-17-69	AS NOTED	GLC

REF DRAWINGS

[illegible]	7-24-68
[illegible]	10
[illegible]	10-15
[illegible]	7.22
[illegible]	1.3
[illegible]	1.5-68
[illegible]	7.22
[illegible]	7.22
7-ABI-6	10-15-68

BLDG. A FLOORS 47-48.70-71(N)

BLDG. B FLOORS 47-48.70-71 (WEST)

STEEL COMPANY

[illegible] ILLINOIS

DATE 12/10

DATE OCT. 31, 1968

DETAILED BY [illegible]

SHEET 2

ARC

LETTERS AND NUMBERS IN ELLIPSES, ie, (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

OVERALL LENGTH = 59'-3"

DAMPING SADDLE

L = "H" @ 5¼" = 59'-3"

"W" (C/C HOLES) = 58'-9"±"

CL4 = 49'-6½"

CL3 = 36'-2½"

CL2 = 22'-10½"

CL1 = 9'-6½"

CORE END

COLUMN END

TRUSS NO. C32T2E — 58'-3" LONG

TRUSS NO. C32T7E — 59'-3" LONG

TRUSS NO. C32T7C — 59'-3" LONG

TRUSS NO. C32T6E — 59'-3" LONG

TRUSS NO. C32T8E — 59'-3" LONG

TRUSS NO. C32T1E — 59'-3" LONG

24T10 | 24T10A | 24T10B | 24T16

W = 20'-0"

2¼" HOLES

℄ HOLES

L = 59'-3"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DR1E SIZE 20' x 59'-3"

SEE DETAIL "D1"

4'-3" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 3'-6½" | 4'-8½"

3" x 2" x 1/4" MK. A2 & A3 | 3" x 8" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A2 & A3

24T10 | 24T10A | 24T10B | 24T16

COVER PLATE PLACEMENT

SEE DETAIL "D" | SEE DETAIL "E" | SEE DETAIL "G"

6'-4½" | 13'-4" | 13'-4" | 13'-4" | 3'-4" | 6'-2½"

10⅜" or 10⅝" — LOCATION OF HOLES — 2½"

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD

5'-0" | 13'-4" | 13'-4" | 13'-4" | 3'-4" | 1'-0"

SEE DETAIL C

11⅞" or 1'-0⅛" — LOCATION OF HOLES — 4½" — 1½"

LOCATION OF PATCH PLATES ON BOTTOM CHORD

MIN. LENGTH OF ⅛" WELD = 4" WELD = 2300

6'-2½"

3'-4"

ARC WELD MIN. 6" LONG WTC 23".00

STUDS @ 8" C/C TYP EACH FLAT W.T.C. 230.00

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

STUDS W.T.C. 230.00

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS - 6½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

SEQ. MK.	QTY.	SIZE	WEIGHT
HIGH TRUSSES			
SHORTING TRUSSES			
ANGLES			
PLATES			
COVER PLATES	B	6"± x .0135" x 15'-2"	ST 303
	C	6"± x .0135" x 13'-2½"	ST 303
	D	8"± x 6.35"± x 7'-…	ST 303
ANGLE CLIPS	CA	2½"x 4½" x 1/4" x 0'-8"	ST 400
⅝ SHEAR ANCHOR	SA2	⅝" ± DIAM. 6'-2"	ST 400
DAMPING SADDLE	DA	3½" x 3½" x 3'-6"	ST 298
	DS	3½" x 3½" x 3'-6"	ST 298
CONNECTION BAR	CB1	1" ⅝ x 1'-3"	ST 400
	CB2	1" ⅝ x 0'-10"	ST 400
CONNECTION PLATES	P1	3½" x 1/4" x 0'-1"	ST 400
	P2	4½" x .39"± x 0'-9"	ST 400
	P3	4½" x .39"± x 1'-0"	ST 400
	P4	6½" x .2"± x 0'-3"	ST 400
	P6	2½" x .32"± x 0'-4"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

A = 1/4"
B = 1/4"

ARC WELD THROUGH COVER PLATE — TOP CHORD PATCH PLATE MK. PP1 — 35" TRUSS — COVER PLATE — PP2

TOP VIEW - DETAIL "A"

ARC WELD W.T.C. 223.00 — ⅝ SA2 — V2

DETAIL "B1" WHEN APPLICABLE

ARC WELD W.T.C. 223.00 — ⅝ SA2 — V3 OR V4

DETAIL "B" WHEN APPLICABLE

⅝ SHEAR ANCHOR (SA2) — TRUSS — COVER PLATE B

TOP VIEW - DETAIL "B"

COVER PLATE B | COVER PLATE B — 2" LAP — R R B

DETAIL "D"

COVER PLATE B | COVER PLATE A — 2" LAP

DETAIL "E"

COVER PLATES #23 GA. THICK — 4" — 1'-9" — COVER PLATE C — END STIFFENER — 8" LAP

DETAIL "F"

2'-2½" TO 8" ℄ NOTCH — END STIFFENERS — COVER PLATE A

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS (MK. F)

ARC WELD W.T.C. 223.00 — 7'-8" — C — 3" — ARC WELD W.T.C. 223.00 — 1/4" x 3" EACH SIDE

DETAIL "C"

ARC WELD W.T.C. 223.00 — 3" — 3" x 2⅜" x ⅜" PATCH PLATE MK. PP2

SECTION C-C

TRUSS — 1/4" x 2" FILLET WELD 228.00 — 1⅛" — 3" — 3" x 2" x 1/4" x — 2" — 2½"

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

MK. A2 3 x 2" x 1/4" ANGLE — SEE DETAIL "J" MK. A3

SECTION A-A END SUPPORT ANGLE

DETAIL "F1" WHEN APPLICABLE — 7⅛" — ARC WELD W.T.C. 223 — COVER PLATE — B

DETAIL "B"

1/4" x 1/2" FILLET W.T.C. 223.00

SECTION B-B

NO.	DATE	REVISION	BY
1	6-17-68	AS NOTED	G.V.C.

REF. DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-1C	11-15-68
7-AB4-3,1	1-3-68
7-AB4-13,14 & 33	7-22-68
7-AB4-12 & 3	11-15-68
36-124	1-6-67
7-AB1-2,3 & 4	7-22-68
7-AB1-1	11-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER — N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 10-11 (SOUTH)

FABRICATION BY: A. J. LEE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY: James Wortham DATE 1/2/70
APPROVED FOR FABRICATION BY: DATE
DESIGN DRAWING NO. 7 AB3-10
DRAWN BY GVC DATE JULY 22, 1968
CHECKED BY TMCHUSA DATE JULY 22, 1968
FABRICATION CONT. NO. W.T.C. 221
PLATE
SHEET NO. OF ONE

PANEL NO. DRIF SIZE 70' x 58'-2"

COVER PLATE PLACEMENT

DETAIL "A"

DETAIL "B"

DETAIL "C"

DETAIL "D"

DETAIL "E"

DETAIL "F"

DETAIL "G"

SECTION A-A

SECTION B-B

SECTION C-C

NO.	DATE	REVISION
1	8-17-69	AS NOTED

BLDG A FLOORS 47-49, 70-71(N)

BLDG B FLOORS 47-49, 70-71 (WEST)

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

OVERALL LENGTH = 59'-3"

DAMPING SADDLE

L = "M" + 5 1/16" = 59'-3"

"M" (C/C HOLES) = 58'-9 3/4"

CL4 = 46'-8 1/16"

CL3 = 36'-2 1/8"

CL2 = 22'-10 1/2"

CL1 = 9'-6 1/16"

CORE END

COLUMN END

A

WC1

WC2

WC3

WC4

6'-0 1/16"

W.C.60'-0"

53/4" HC4 = 5'-9 1/4"

C/C HOLES 5'-9 1/4"

10 1/4"

TRUSS NO. C32T2E 59'-3" LONG

TRUSS NO. C32T7E 59'-3" LONG

TRUSS NO. C32T6E 59'-3" LONG

TRUSS NO. C32T5E 59'-3" LONG

TRUSS NO. C32T1E 59'-3" LONG

DUS-2

DUS-1

24T10

24T10A

24T10B

24T16

20'-0"

1'-5 1/2"

20" C HOLES

HOLES 1 3/8"

L = 59'-3"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D81E SIZE 20' x 59'-3"

SEE DETAIL "A"

SEE DETAIL "B"

PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1

4 1/16"

CORE END

COLUMN END

DAMPING SADDLE

4'-9" 4'-10 1/2" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6 1/2" 4'-0 1/2"

3" x 2" x 1/4" MK. A2; A2 — 3" x 2" x 1/4" MK. A1 — 24T10 — 3" x 2" x 1/4" MK A1 — 24T10A — 3" x 2" x 1/4" MK. A1 — 24T10B — 3" x 2" x 1/4" MK. A1 — 24T16 — 3" x 2" x 1/4" MK. A1; A2

A 2'-1 1/4" C 13'-2 1/2" B 15'-2" SEE DETAIL "D" 15'-2" SEE DETAIL "E" A 13'-11 1/2"

SEE DETAIL "F" SEE DETAIL "G"

COVER PLATE PLACEMENT

6'-4 1/2" 4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"

10 1/4" OR 10 3/4" 10 3/4" OR 10 1/4"

LOCATION OF HOLES — PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY. — SEE DETAIL "A" — PP1 — LOCATION OF HOLES

LOCATION OF PATCH PLATES ON TOP CHORD

6" 5'-0" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

SEE DETAIL C

11 3/4" OR 1'-0 1/8"

PP2

4 1/2"

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD

EXT. COL. REF LINE

6'-6 1/16" 8"

MIN. LENGTH OF WELD = 4" W.C. 224.00

3'-4"

F1

SEE W.C. 230.00 FOR TYP. EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.C. 253.00

STUDS W.C. 230.00

F1

W.C.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/16" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK.	PCS.	SIZE	DRWG
FLOOR TRUSSES	T1E	1	C32T1E - 59'-3"	ST 201E
	T2E	1	C32T2E - 59'-3"	ST 202E
	T5E	2	C32T5E - 59'-3"	ST 205E
	T6E	1	C32T6E - 59'-3"	ST 206E
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 5/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 5/8"	ST 403
DIAGONAL FLATS	F1	6	1 1/4" x 8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1 1/4" x 1'-9"	ST 400
	PP2	16	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	0" x .0135" x 13'-2"	ST 303
	B	6	0" x .0135" x 15'-2"	ST 303
	C	3	0" x .0135" x 13'-2 1/2"	ST 303
	D	3	0" x .0135" x 2'-2 1/4"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/4" x 1/4" x 0'-6"	ST 400
#6 SHEAR ANCHOR	SA2	9	#6 REBAR 2'-0" = 9"	ST 400
DAMPING SADDLE	DUS-1	2	3" x 3" x 3/8" x 5'-6"	ST 208
	DUS-2	1	3" x 3" x 3/8" x 5'-6"	ST 208
CONNECTION BAR	CB1	4	1" x 9" x 1'-3"	ST 400
	CB4	8	1" x 9" x 0'-10"	ST 400
CONNECTION PLATES	P1	2	3/8" x 7 1/2" x 1'-0"	ST 400
	P2	1	4" x 6" x 0'-8"	ST 400
	P3	1	4" x 6" x 1'-0"	ST 400
	P4	2	6" x 7" x 0'-8"	ST 400
	P5	1	4" x 6" x 0'-8"	ST 400

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN SEALED BEAD ELECTRODES OF SERIES E70 EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTIONS ARC WELDS TO BE 1/4" FILLET THROAT FILLET.

TOP VIEW - DETAIL "A"

DETAIL "A"

DETAIL "B" WHEN APPLICABLE

SECTION B-B

DETAIL "B" WHEN APPLICABLE

TOP VIEW - DETAIL "B"

DETAIL "D"

DETAIL "E"

DETAIL "F"

DETAIL "G"

SECTION A-A END SUPPORT ANGLE

DETAIL "C"

SECTION C-C

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION
A	6-17-68	AS NOTED

REF. DRWGS.

7-A82 S & II		7-22-68
7-A83		10-15-68
7-A84-3, 7 & 39		7-22-68
7-A84-42 & 3		10-15-68
3A-124		5-3-68
7-A81-7 1 & 2		7-22-68
7-A81-5		10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (SOUTH)

PANEL D81E

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON ILLINOIS

DESIGN DRAWING NO. 7-A83-0

DATE

APPROVED FOR FABRICATION BY PORT OF N.Y.A. — DATE

DRAWN BY — DATE JULY

APPROVED FOR FABRICATION BY FOR FABRICATOR — DATE

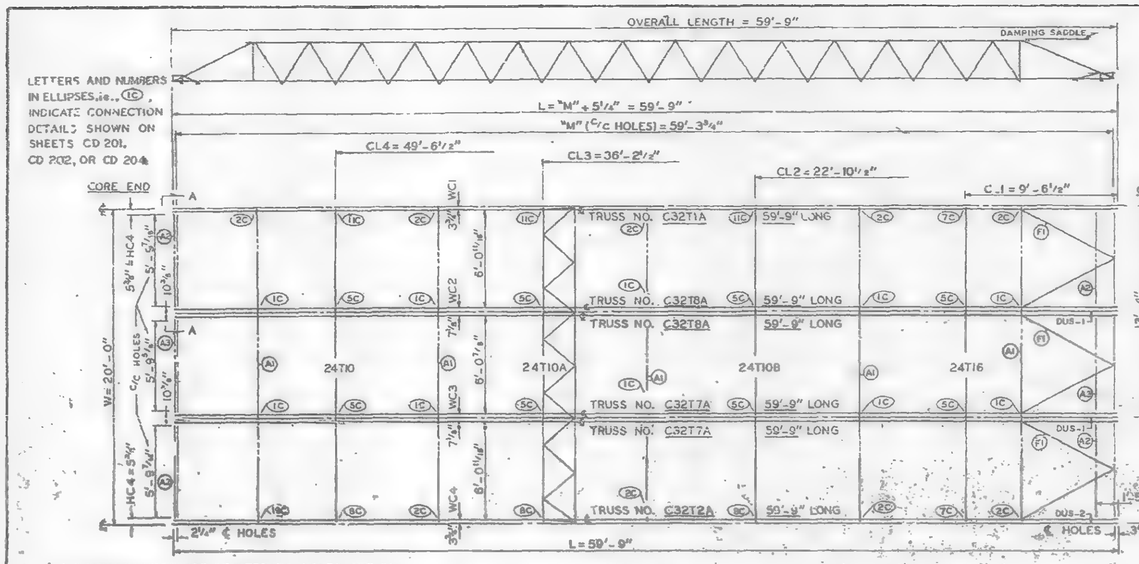
CHECKED BY — DATE JULY

BY CHANGE OR REV. NO.

DEPT. NO.

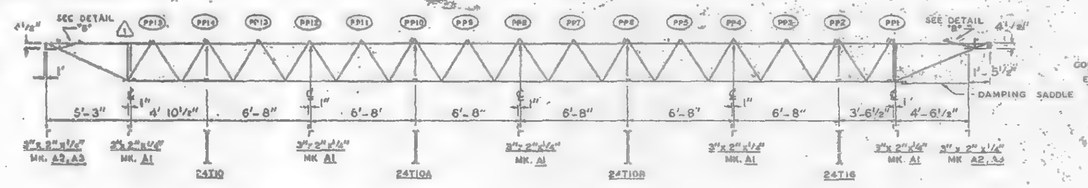
FABRICATION CONT. NO. 221

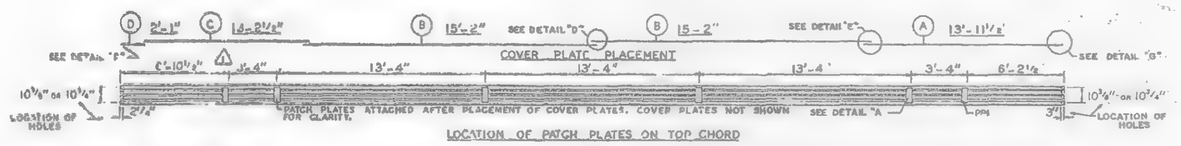
SHT. 1 OF 1



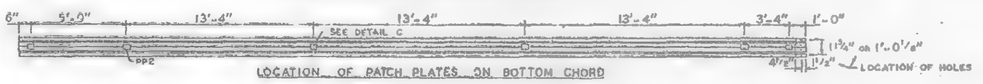
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1A SIZE 20' x 59'-9"

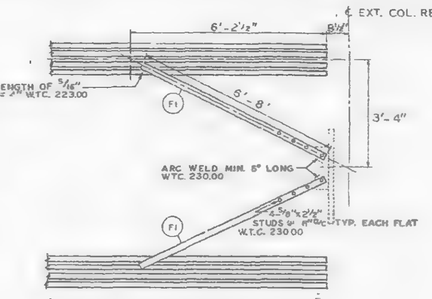




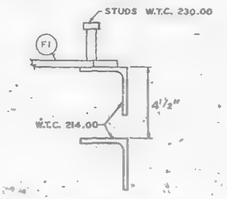
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



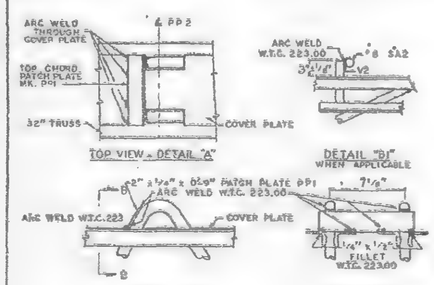
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

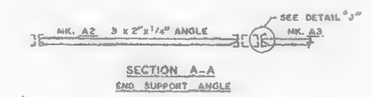


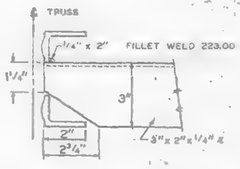
℄ CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T1A	1	C32T1A - 59'-9"	ST 201A
	T2A	1	C32T2A - 59'-8"	ST 202A
	T7A	2	C32T7A - 59'-9"	ST 207A
	T8A	2	C32T8A - 59'-9"	ST 208A
BRIDGING TRUSSES	T1C	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 13/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 13/16"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 3 7/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	6" x .0135" x 13'-2 11/16"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 330
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	F.S.C.	12	#8 ø REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	8 1/2" x 3 1/2" x 3/16" x 3'-8 1/8"	ST 298
	DUS-2	1	8 1/2" x 3 1/2" x 7/16" x 3'-8 1/8"	ST 298
CONNECTION BAR	C81	4	1" ø x 1'-3"	ST 400
	C84	8	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 2" x 6 1/16"	ST 400
	P2	1	4 1/8" x .39" x 0'-6"	ST 400
	P3	1	4 1/8" x .39" x 1'-0"	ST 400
	P4	3	6 1/2" x 1 1/2" x 0'-6"	ST 400
	P8	1	4 1/8" x .39" x 0'-6"	ST 401

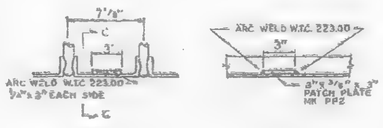
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET







DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



1	6-10-69	AS NOTED	G.D.C
BY	DATE	REVISION	BY

REF DRWGS.

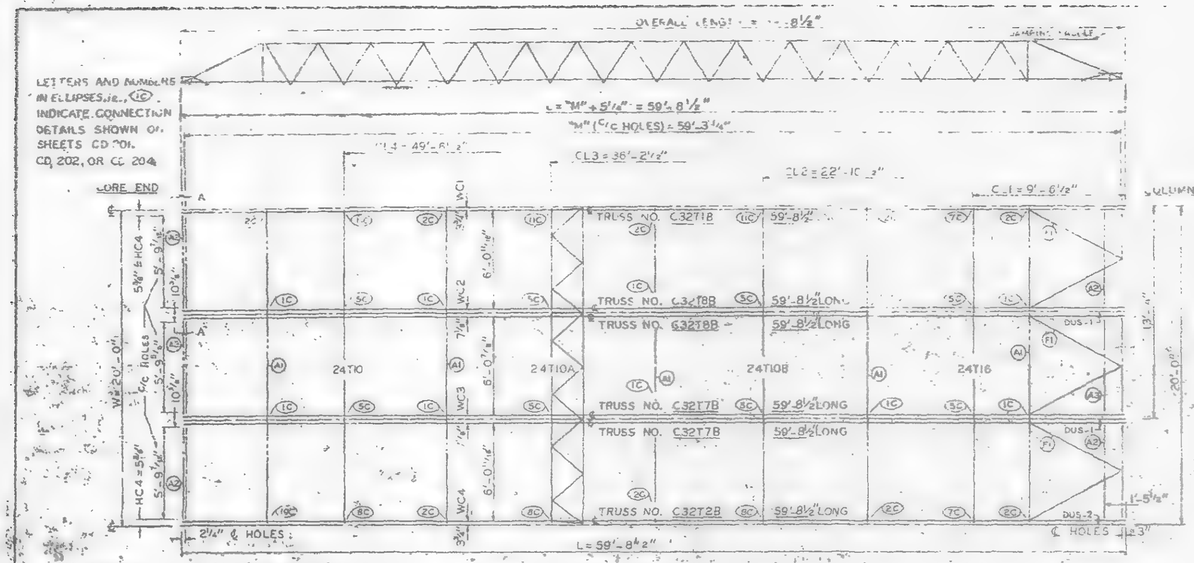
7-A82-5 & 11	7-22-68
7-A83-9	10-15-68
7-A84-39	7-22-68
7-A84-18 & 18	7-22-68
7-A84-42 & 3	10-15-68
SA-124	1-8-69
7-A81-2, 3 & 4	7-22-68
7-A81-3, 4 & 5	10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) ℄'s = 58, 60, 66, 68,
69 (NORTH) PANEL ℄'s 20' x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) ℄'s = 69 ± 0"

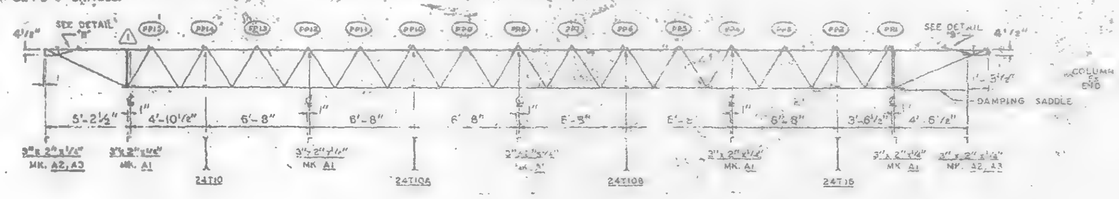
FABRICATION BY LACLEDE STEEL COMPANY

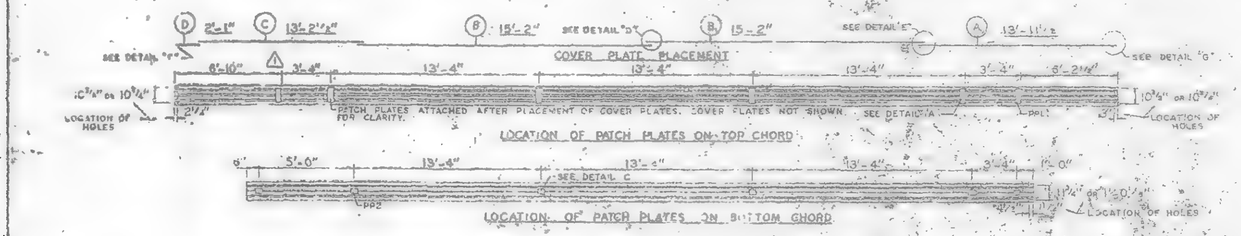
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-9 4-15-68	U PLATE
APPROVED FOR FABRICATION BY P.O.N.Y.A. FOR P.O.N.Y.A.	DATE 6-10-69	DRAWN BY G.D.C DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATION	DATE	CHECKED BY T.M.CHURA DATE JULY 22, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A. CAMPBELL		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP D1A

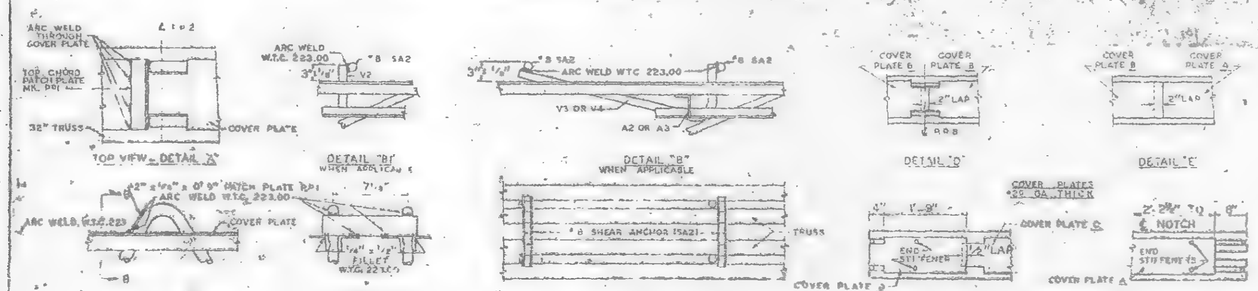


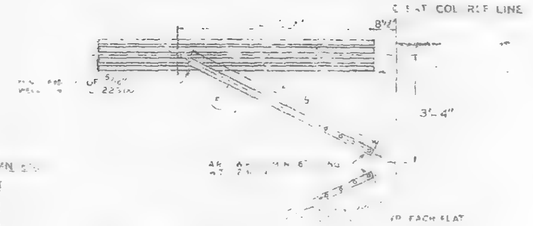
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

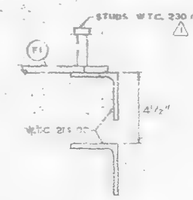
PANEL NO. D1B SIZE 20' x 59'-8½"







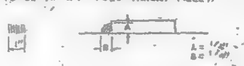


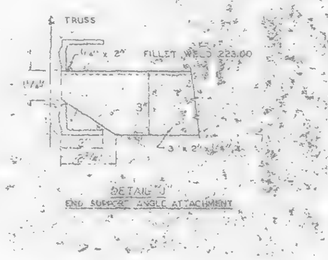


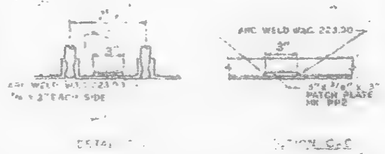
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				SEE DRWG
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T1B	1	C32T1B - 59'-8½"	ST 2018
	T2B	1	C32T2B - 59'-8½"	ST 2029
	T7B	2	C32T7B - 59'-8½"	ST 2078
	T8B	2	C32T8B - 59'-8½"	ST 2088
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x ¼" ANGLE	A1	5	3" x 2" x ¼" x 19'-11"	ST 403
	A2	4	3" x 2" x ¼" x 5'-11⅝"	ST 403
	A3	2	3" x 2" x ¼" x 5'-11⅝"	ST 403
DIAGONAL FLATS	F1	6	1½" x 5⅞" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400
COVER PLATES	A	3*	9" x .0138" x 13'-1¼"	ST 303
	B	6	9" x .0138" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2½"	ST 303
	D	31	9" x .0135" x 2'-1"	ST 336
ANGLE CLIPS	C1	24	2" x 1½" x ¼" x 0'-8"	ST 400
⅜" SHEAR ANCHOR	SA2	12	⅜" ø STUD AR x 0'-0"	ST 400
DAMPING SADDLE	DUS-1	2	3½" x 3½" x ⅜" x 3'-7"	ST 298
	DUS-2	1	3½" x 3½" x ⅜" x 3'-6⅛"	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
	CB4	8	1" ø x 3'-10"	ST 400
CONNECTION PLATES	P1	4	3½" x 3½" x ⅜" x 4½"	ST 400
	P2	1	4½" x .38" x 0'-8"	ST 400
	P3	1	4½" x .32" x 1'-0"	ST 400
	P4	3	6½" x ½" x 0'-8"	ST 400
	P6	1	4½" x .30" x 0'-10"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.







NO.	DATE	REVISION	BY
1	6-9-69	AS NOTED	G.D.C

⚠ REF. DRWGS.		
7-A82-3 & 11	7-22-68	
7-A83-9	10-15-68	
7-A84-31	1-2-68	
7-A84-13, 9 & 39	7-22-68	
7-A84-22 & 3	10-15-68	
SA-154	1-6-69	
7-191-2 & 4	7-22-68	
7-191-5	10-15-68	

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 84-91, 93-106 (N)

PANEL D1B = (20'-0" x 59'-8½")

BLDG. B FLOORS 84-91, 93-106 (WEST) ⚠

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY _____ DATE _____

APPROVED FOR FABRICATION BY _____ DATE _____

DETAILED BY P. EARL WEBER

DESIGN DRAWING NO. 7-A83-9

DRAWN BY G.D.C DATE OCT 24, 1968

CHECKED BY T.R. CHASE DATE OCT 24, 1968

FABRICATION CONTROL NO. W.E.G. 1921

GRADE OF STEEL A36

SHEET NO. 1 OF 1

LETTERS AND NUMBERS IN ELLIPSES ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 203 CD 204

CORE END

COLUMN END

TRUSS NO. C32T1C 59'-8" LONG

TRUSS NO. C32T8C 59'-8" LONG

TRUSS NO. C32T8C 59'-8" LONG

TRUSS NO. C32T7C 59'-8" LONG

TRUSS NO. C32T2C 59'-8" LONG

24T10 24T10A 24T10B 24T16

C.L. "M" = 51'-4" = 59'-8"

"M" (C to C HOLES) = 59'-2 3/4"

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/4"

CL2 = 22'-10 7/8"

C.L = 9'-6 1/2"

2 1/4" ℄ HOLES

L = 59'-8"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DIC SIZE 20" x 59'-8"

SEE DETAIL "F"

SEE DETAIL "E"

SEE DETAIL "D"

SEE DETAIL "C"

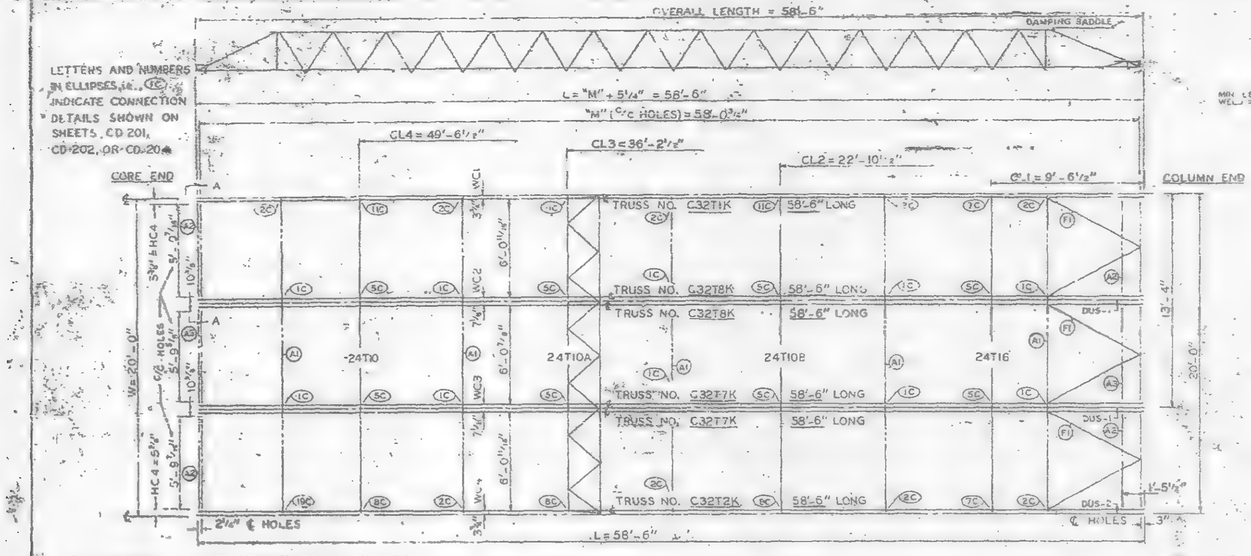
SEE DETAIL "B"

SEE DETAIL "A"

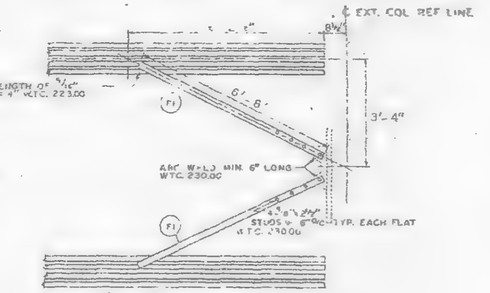
LOCATION OF HOLES

PATCH PLATES ATTACHED AFTER PLACEMENT OF FIELD PLATE (NOT SHOWN FOR CLARITY)

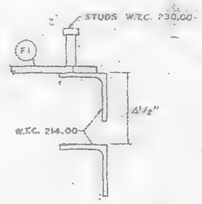
LOCATION OF PATCH PLATES ON BOTTOM CHORD



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

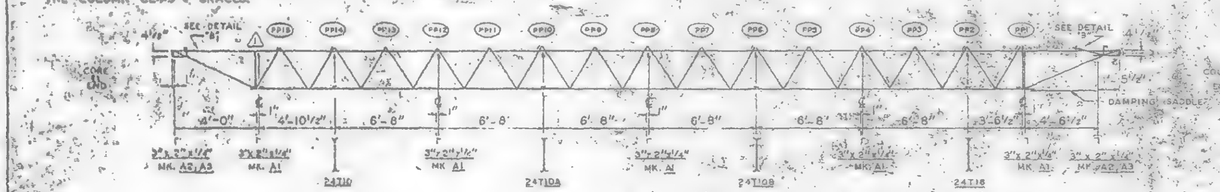


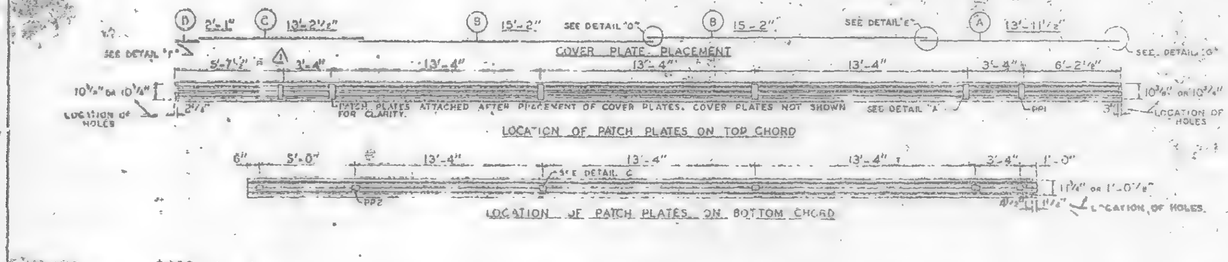
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

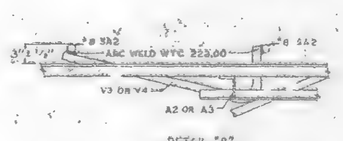
MATERIAL	MK.	PCS.	SIZE	GR.
FLOOR TRUSSES	T1K	1	C32T1K - 58'-6"	ST 290 K
	T2K	1	C32T2K - 58'-6"	ST 290 K
	T7K	2	C32T7K - 58'-6"	ST 290 K
	T8K	2	C32T8K - 58'-6"	ST 290 K
ENDING TRUSSES	T10	1	24T10 - 19'-11"	ST 290
	T10A	1	24T10A - 19'-11"	ST 290
	T10B	1	24T10B - 19'-11"	ST 290
	T16	1	24T16 - 19'-11"	ST 290
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MASONRY PLATE	[illegible]	[illegible]	[illegible]	[illegible]
PATCH PLATES	PP1	18	3" x 1 1/4" x 3'-0"	ST 36
	PP2	18	3" x 3" x 6'-3"	ST 36
COVER PLATES	B	8	8" x .0135" x 18'-2"	ST 303
	C	3	8" x .0135" x 13'-8 1/2"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 2" x 4 1/2" x 0'-3"	ST 400
#8 SHEAR ANCHOR	SA2	0	#8 S.A. x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3 1/2" x 3'-6"	ST 296
	DUS-2	1	3/16" x 3 1/2" x 3'-6"	ST 296
CONNECTION BAR	CB1	4	1" ℄ x 1'-3"	ST 400
	CB4	6	1" ℄ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/16" x 3/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400
	P4	3	8 1/2" x [illegible] x 0'-6"	ST 400
	P5	1	4 1/2" x 3/8" x 1'-[illegible]"	ST 400

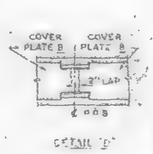
NOTES: (1) ALL [illegible] TO BE MADE WITH LOW HYDROGEN ELECTRODES IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

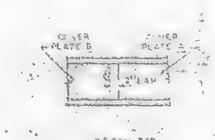
PANEL NO. D1K SIZE 20' x 58'-6"

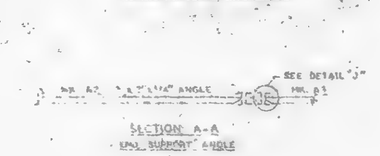


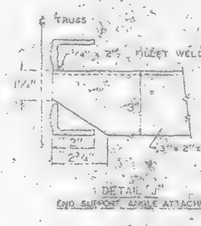












NO.	DATE	REVISION	BY
1	6-10-69	AS NOTED	D.E.L.

REF. DRWGS

1. AB3-3411	[illegible]
2. AB3-0	[illegible]
3. AB4-[illegible]	[illegible]
4. AB4-15-16 & 20	3-22-68
5. AB4-43 & 51	3-15-68
6. SF-124	9-69
7. [illegible] 2, 3 & 4	2-68
8. [illegible]	[illegible]

THE PORT OF NEW YORK AUTHORITY

BLDG. A [illegible] 46 (N)

PANEL [illegible] = 58'-6"

BLDG. B FLOORS 46 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY [illegible] DATE [illegible]

APPROVED FOR FABRICATION BY [illegible] DATE [illegible]

LACLEDE STEEL CO.

DESIGN DRAWING NO. 7A493-V

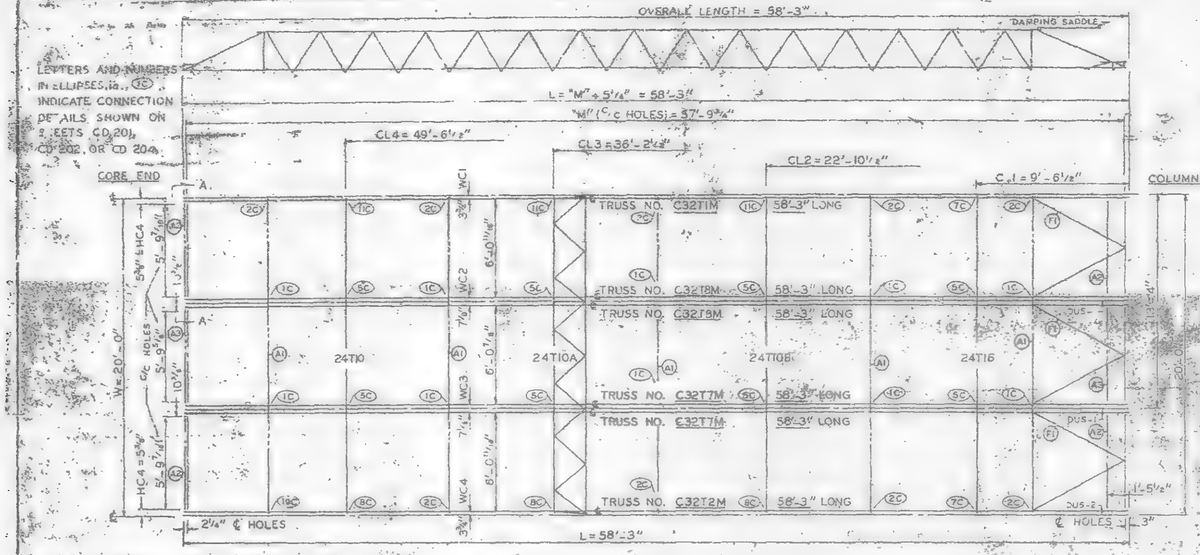
DRAWN BY [illegible] DATE [illegible]

CHECKED BY [illegible] DATE 12-22-1969

FABRICATION DWG NO. [illegible]

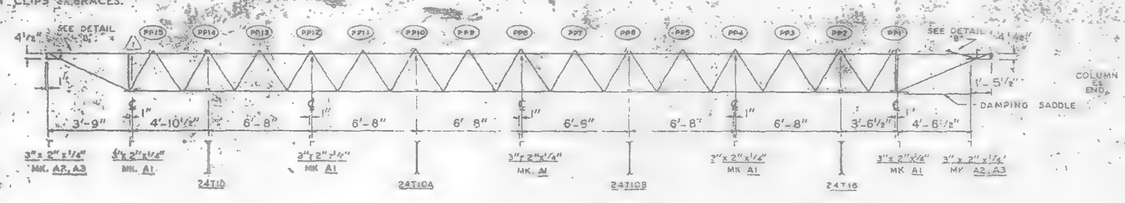
SHEET NO. [illegible]

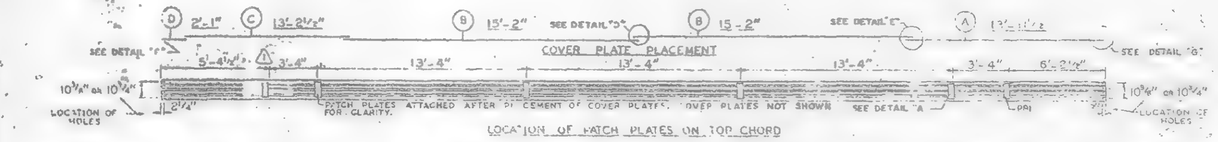
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

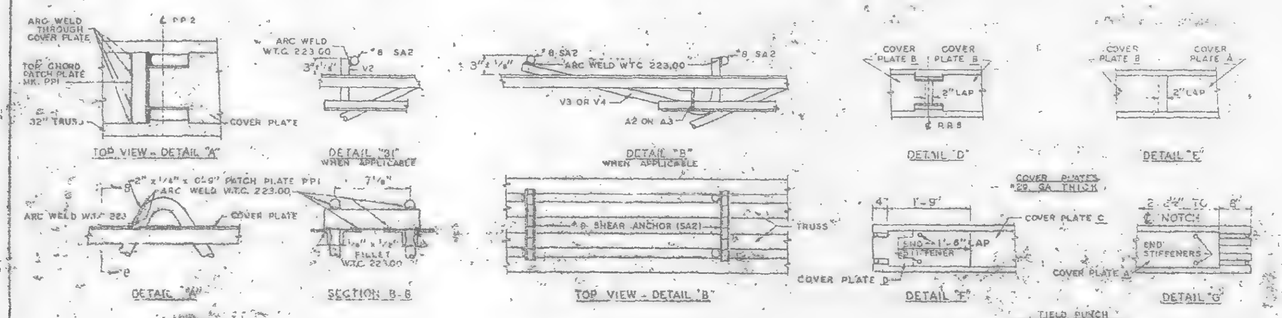


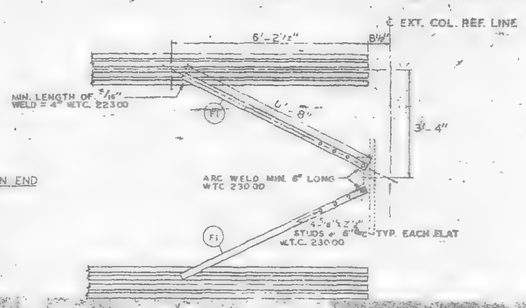
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

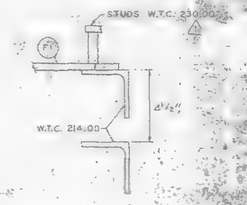
PANEL NO. DIM. SIZE : 20' x 58'-3"





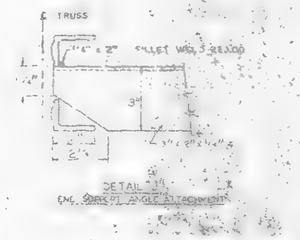


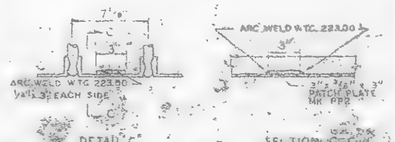




REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1M	1	C32T1M - 58'-3"	ST 201M
	T2M	1	C32T2M - 58'-3"	ST 202M
	T7M	2	C32T7M - 58'-3"	ST 207M
	T8M	2	C32T8M - 58'-3"	ST 208M
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 3/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-3 1/2"	ST 403
DIAGONAL FLATS	F1	8	1'-3" x 5/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1 7/8" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 0'-8"	ST 400
COVER PLATES	A	3	6" x .0135" x 15'-11"	ST 303
	B	3	7" x .0135" x 15'-2"	ST 303
	C	3	7" x .0135" x 13'-2 1/2"	ST 303
	D	3	7" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
"B" SHEAR ANCHOR	SA2	9	5/8" ℄ REBAR x 0'-10"	ST 401
DAMPING SADDLE	DUS-1	2	3" x 3" x 3/16" x 3'-8 1/2"	ST 298
	DUS-2	1	3" x 3" x 3/16" x 3'-8 1/2"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB2	3	1" ϕ x 2'-1"	ST 400
CONNECTION PLATES		4	3/16" x 3 1/2" x 3'-8 1/2"	ST 400
	P2	1	11 1/2" x .39" x 0'-8"	ST 400
	P3	1	49 1/2" x .39" x 1'-0"	ST 400
	P4	3	10 1/2" x 1/4" x 0'-6"	ST 400
	P8	1	4 1/2" x .39" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUIV.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





NO.	DATE	REVISION	BY
1	8-10-60	AS NOTED	J.D.

REF. DRWGS

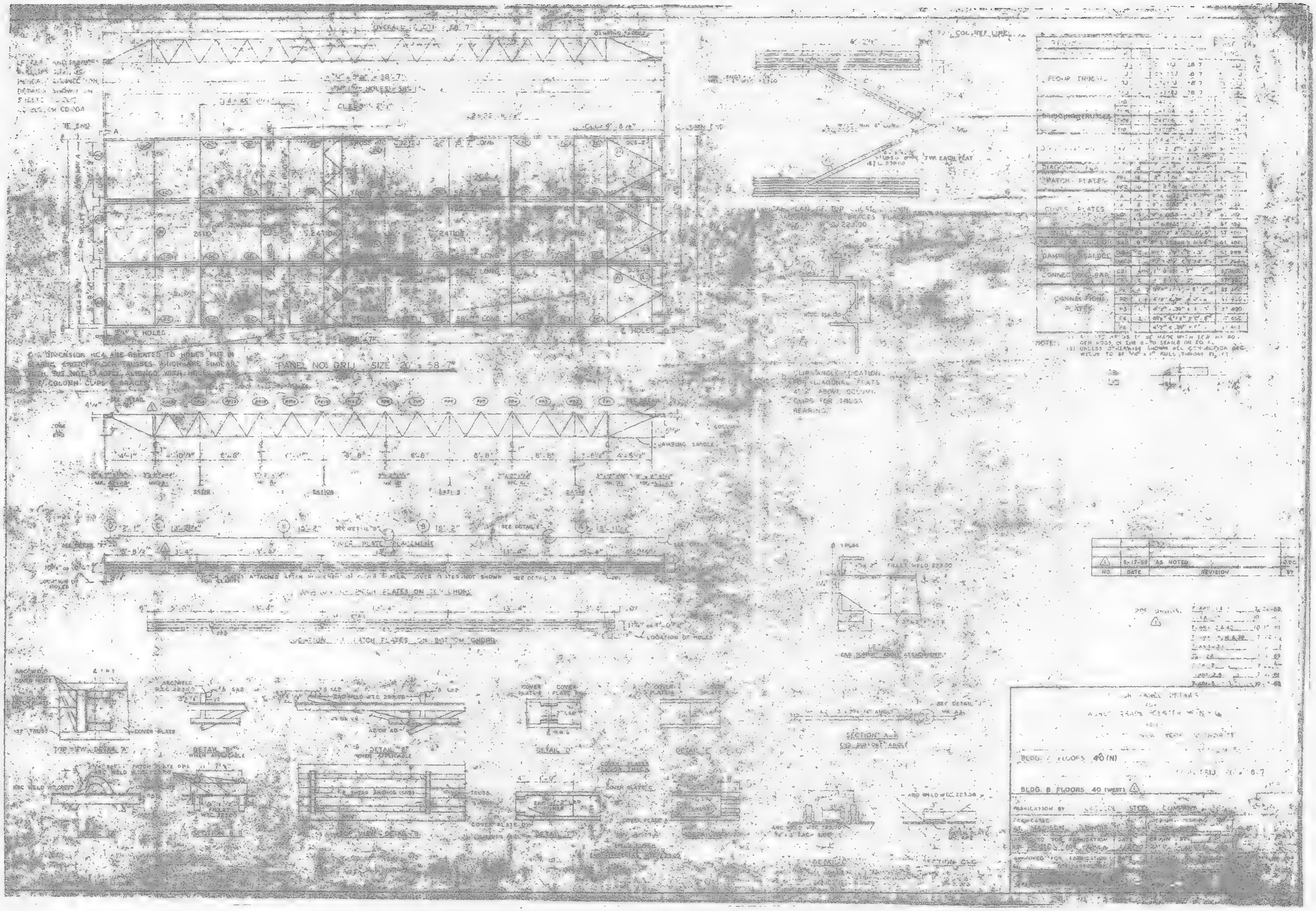
7-A82-1 & 11	7-22-58
7-A83-9	10-15-58
7-A84-3,1	" " "
7-A84-13,16 & 39	7-22-58
7-A84-42 & 3	10-15-58
SC-124	1-6-59
7-381-2,3 & 4	7-22-58
7-381-5	10-15-58

FLOOR PANEL - DETAILS
FOR:
WORLD TRADE CENTER - N.Y.C.
FOR:
THE PORT OF NEW YORK AUTHORITY

BLDG. A. FLOORS 72-73 (N)
PANEL "M" - 58'-3"
BLDG. B FLOORS 72-73 (WEST) (1)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A88-9	10-15-58
APPROVED FOR FABRICATION / COD N.Y.P.A.	DATE 11/21/	DRAWN BY JATE	DATE 9-1-58
APPROVED FOR FABRICATION FOR FABRICATOR	DATE A	CHECKED BY Y.W.E. DATE	DATE 10-24-1958
		FABRICATION CONT. NO. W.T.C. # 221	


PANEL NO. DR1J SIZE 20' x 58'-7"
TRUSS
HOLES
SEE DETAIL
TOP CHORD
BOTTOM CHORD
COVER PLATE PLACEMENT
SECTION - PLATES ON BOTTOM CHORD
DETAIL "A"
DETAIL "B"
DETAIL "C"
DETAIL "D"
DETAIL "E"
SECTION A-A
END SUPPORT ANGLE
SECTION C-C
BRACES
FLOOR TRUSS
DIAGONAL
BATCH PLATES
CLIPS PLATES
DIAPHRAGM SAGDE
CONNECTION BAR
CHANNEL STRIP PLATES
BLDG. A FLOORS 40 (N)
BLDG. B FLOORS 40 (WEST)
8-17-69 AS NOTED
NO. DATE REVISION

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN IN SHEETS CD 201, CD 202, OR CD 204.

CORE END

COLUMN END

CL4 = 49'-6½"

CL3 = 38'-2½"

CL2 = 22'-10"

CL1 = 9'-6½"

TRUSS NO. C32T2G 58'-11" LONG

TRUSS NO. C32T7G 58'-11" LONG

TRUSS NO. C32T8G 58'-11" LONG

TRUSS NO. C32T1G 58'-11" LONG

24T10 | 24T10A | 24T10B | 24T16

DUS-2 | DUS-1 | DUS-1

W = 20'-0"

HC1 = 8'-9½" | HC2 = 10'-3" | HC3 = 10'-3" | HC4 = 8'-9½"

6'-0" | 6'-0½" | 6'-0½" | 5'-6½"

80 SPACES @ 3" = 20'-0"

2½" ℄ HOLES

L = 58'-11"

℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D81G SIZE 20' x 58'-11"

SEE DETAIL "B1"

CAMBERING SADDLE

4'-5" | 4'-10½" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 6'-8" | 3'-6½" | 4'-6½"

3½" x 3½" x ¼" MK. A2, A3 | 3½" x 3½" x ¼" MK. A1 | 3½" x 3½" x ¼" MK. A1 | 3½" x 3½" x ¼" MK. A1 | 3½" x 3½" x ¼" MK. A1 | 3½" x 3½" x ¼" MK. A1 | 3½" x 3½" x ¼" MK. A1 | 3½" x 3½" x ¼" MK. A1 | 3½" x 3½" x ¼" MK. A1 | 3½" x 3½" x ¼" MK. A2

24T10 | 24T10A | 24T10B | 24T16

D 2'-1" | C 13'-2½" | B 15'-2" | B 15'-2" | A 13'-11½"

SEE DETAIL "F" | SEE DETAIL "E" | SEE DETAIL "C"

COVER PLATE PLACEMENT

3'-4" | 13'-4" | 13'-4" | 13'-4" | 3'-4" | 5'-4½"

10¾" OR 10¾" LOCATION OF HOLES

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY. SEE DETAIL "A"

LOCATION OF PATCH PLATES ON TOP CHORD

6" | 5'-0" | 13'-4" | 13'-4" | 13'-4" | 3'-4" | 1'-0"

SEE DETAIL "C"

1¾" OR 1'-0½" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD

6'-2½" | 8½" | ℄ EXT. COL. REF. LINE

MIN. LENGTH OF ⅝" WELD = 4" W.I.C. 22300

ARC WELD MIN 6" LONG W.I.C. 23000

4-¾" ø STUDS @ 8" c/c W.I.C. 23000 - TYP. EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.I.C. 823.00

STUDS W.I.C. 230.00

3½" c/c

W.I.C. 216 OC

DETAIL OF ANGLE LOCATION FOR DIAGONAL PLATES 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL

MATERIAL	MK. NO.	QTY.	SIZE	
FLOOR TRUSSES	T2G	1	C32T2G	
	T7G	2	C32T7G	
	T8G	2	C32T8G	
	T1G	1	C32T1G	
BRIDGING TRUSSES	T10	1	24T10	
	T10A	1	24T10A	
	T10B	1	24T10B	
	T16	1	24T16	
3½" x 3½" x ¼" ANGLE	A	3		
	A2	4		
	A3	2		
DIAGONAL PLATE	P	6		
PATCH PLATES	PP1	18		
	PP2	48		
COVER PLATES	A	3		
	B	6		
	C	3		
	D	2		
ANGLE CLIPS	CI	20		ST 400
⅞ø SHEAR ANCHOR	SA2	0		ST 400
DAMPING SADDLE	DUS-1	2		ST 298
	DUS-2	1		ST 298
CONNECTION BAR	CB1	4		ST 400
CONNECTION PLATES	P1	3		ST 400
	P2	3		ST 400
	P3	3		ST 400
	P4	3		ST 401

NOTES: (1) ALL WELDS TO BE MADE WITH LOW HYDROGEN ELECTRODES IN THE E-70 SERIES OR EQUIVALENT.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ANGLE WELDS TO BE ⅜" x 4" FULL THROAT FILLET.

SEE DETAIL "A"

SEE DETAIL "B"

COLUMN END

CAMBERING SADDLE

5½"

CORE END

TRUSS

2" x 2" FILLET WELD 223.00

1½"

3"

2" x 2" x ¼" ∠

DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

MK. A2 3" x 2" x ¼" ANGLE | SEE DETAIL "J" MK. A3

ARC WELD THROUGH COVER PLATE

TOP CHORD PATCH PLATE MK. PP1

32" TRUSS

COVER PLATE

TOP VIEW - DETAIL "A"

ARC WELD W.I.C. 223.00

⅞ SA2

3½" x ¼"

V2

DETAIL "B1" WHEN APPLICABLE

3½" x ¼"

⅞ SA2

ARC WELD W.I.C. 223.00

V3 OR V4

A2 OR A3

DETAIL "B" WHEN APPLICABLE

COVER PLATE B | COVER PLATE B

2" LAP

PRB

DETAIL "D"

COVER PLATE B | COVER PLATE A

2" LAP

DETAIL "E"

2" x ¼" x 10'-0" PATCH PLATE PP1

ARC WELD W.I.C. 223.00

ARC WELD W.I.C. 223.00

COVER PLATE

7½"

3" x ⅜" x 7½" FILLET W.I.C. 223.00

DETAIL "A"

SECTION B-B

⅞ SHEAR ANCHOR (SA2)

TRUSS

COVER PLATE B

TOP VIEW - DETAIL "B"

COVER PLATES 7/8" OR THICKER

4"

1'-9"

END STIFFENER

10" LAP

COVER PLATE B

DETAIL "I"

2-2½" TO ℄ NOTCH

END STIFFENERS

COVER PLATE A

DETAIL "G"

FIELD PITCH COVER PLATES OVER END STIFFENERS W.I.C. 223.00

7½"

3"

ARC WELD W.I.C. 223.00 ½" x 3" EACH SIDE

DETAIL "C"

ARC WELD W.I.C. 223.00

3"

5½" x ⅝" x 8" PATCH PLATE MK. PP2

SECTION C-C

NO.	DATE	REVISIONS
1	8-17-65	AS NOTED

REF. DRWGS.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11, 38 (NORTH) 39-40 (SOUTH)

BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN CHECKED BY A.G.L. DATE 7-30-65

DRAWN BY A.G.L. DATE 8-5-65

CHECKED BY T.W.H. DATE JULY 30, 1965

APPROVED FOR FABRICATION BY [redacted] DATE 7/30/65

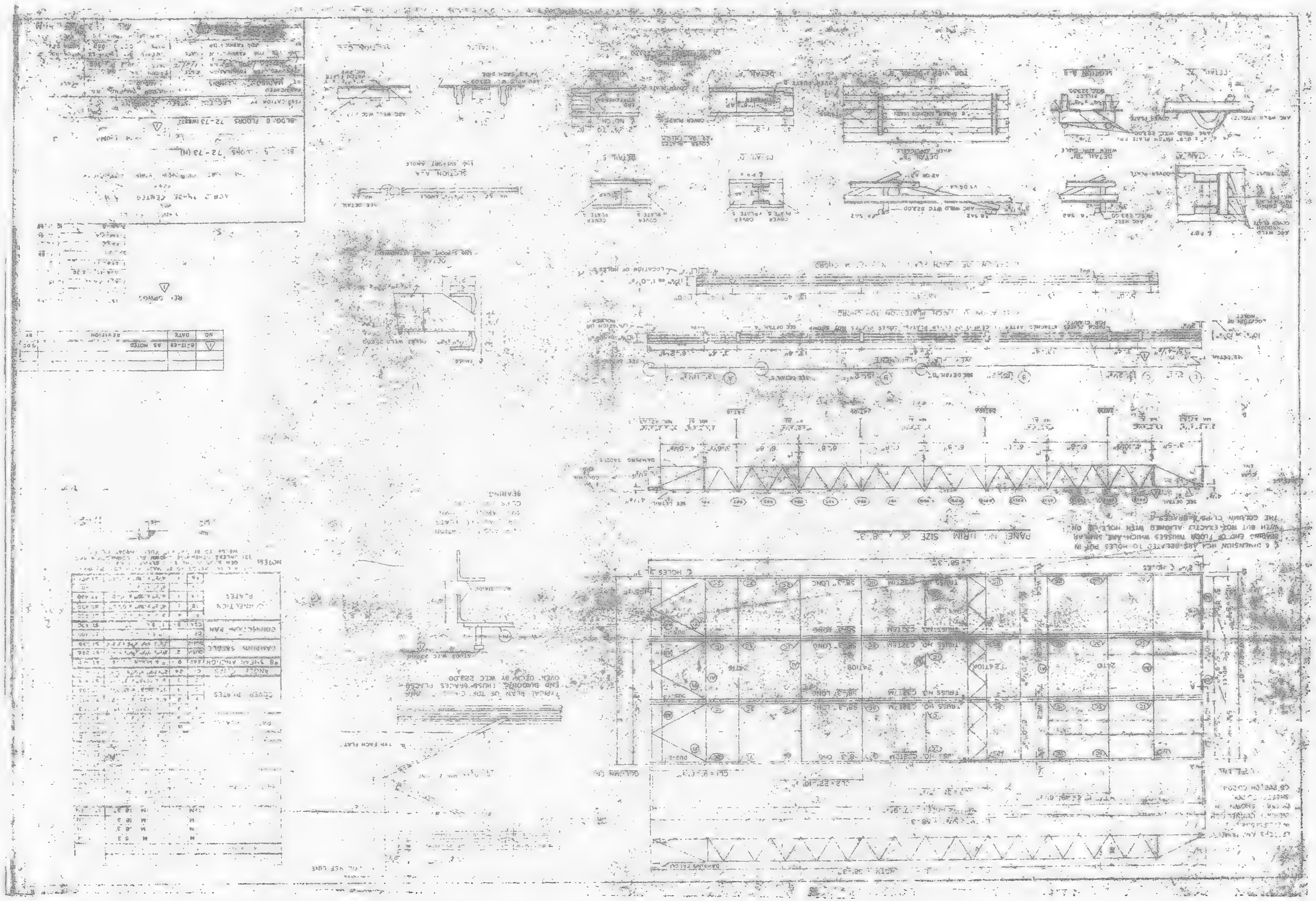
APPROVED FOR FABRICATION BY [redacted] DATE

DETAILED [redacted]

FABRICATION CODE 4 7 C 321

PLATE

SHEET NO. A 1 OF 1 SHEETS



PANEL NO. D81K SIZE 120' x 8'-6"

TRUSS NO. C32T K 58'-6" LONG

TRUSS NO. C32T7K 58'-6" LONG

TRUSS NO. C32T8K 58'-6" LONG

TRUSS NO. C32T1K 58'-6" LONG

TYPICAL PLAN OF TOP CHORD LATERAL END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

TYPICAL PLAN OF BOTTOM CHORD LATERAL END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS AND ABOVE COLUMN CLIPS FOR TRUSS BEARING

| | | |

PANEL NO. DRIP SIZE 20' x 57'-7"

TYPICAL PLAN OF TOP CHORD COLUMN AND DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.C. 223.00

CLIP ANGLE LOCATION FOR DIAGONAL SEATS 1 3/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

SECTION A-A
END SUPPORT ANGLE

SECTION C-C

SECTION B-B

DETAIL 'A'

DETAIL 'B'
WHEN APPLICABLE

DETAIL 'C'

DETAIL 'D'

DETAIL 'E'

DETAIL 'F'

DETAIL 'G'

TOP VIEW - DETAIL 'B'

END OF TRUSS CUT (W.C. 223.00) DETAIL

LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

COVER PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN ARE OMITTED FOR CLARITY.

BLDG. B FLOORS 74 (WEST)

FABRICATED AT MADISON, ILLINOIS

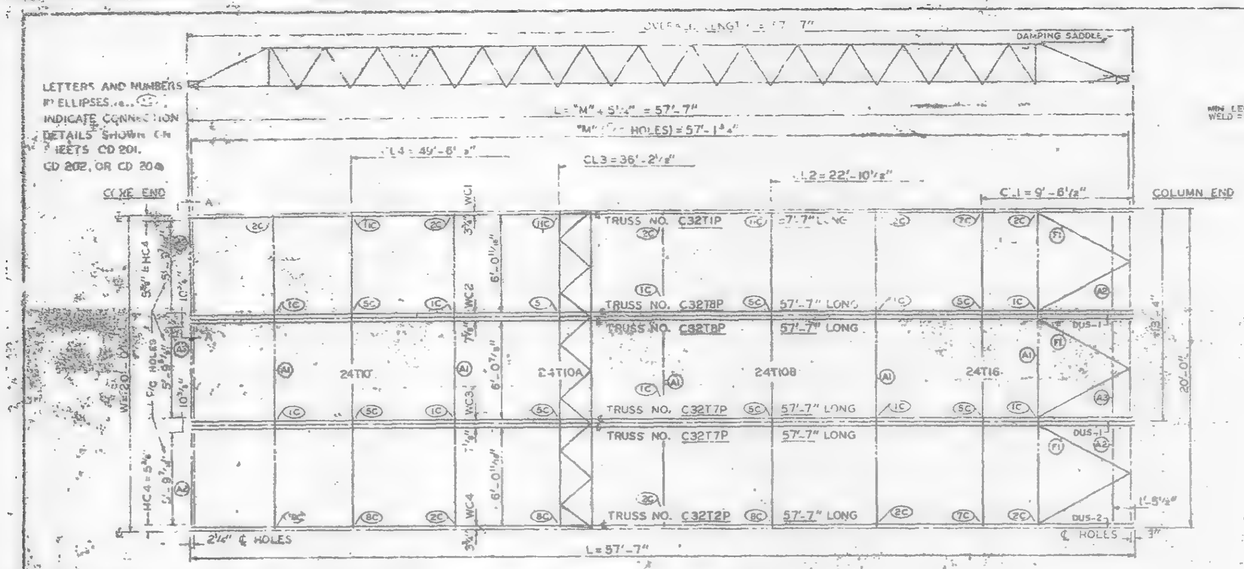
APPROVED FOR FABRICATION

APPROVED FOR FABRICATED

DATE 11-6-73

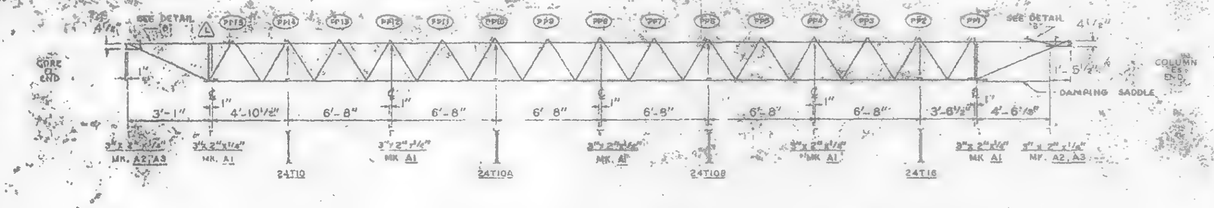
NO. 1 DATE 11-17-73 AS NOTED

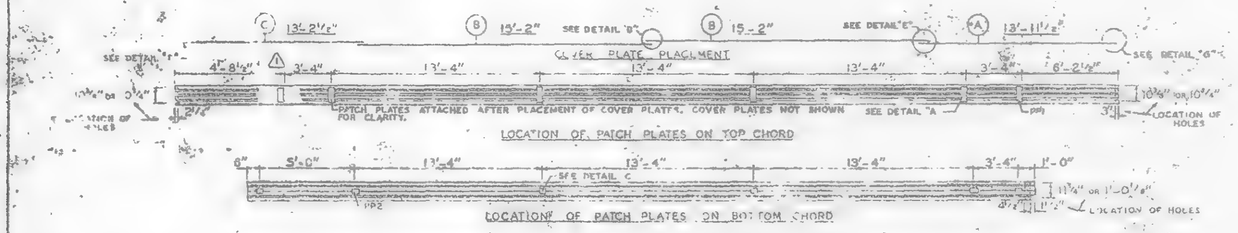
LETTERS AND NUMBERS IN ELLIPSES (Ⓐ, Ⓑ, ETC.) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 203.

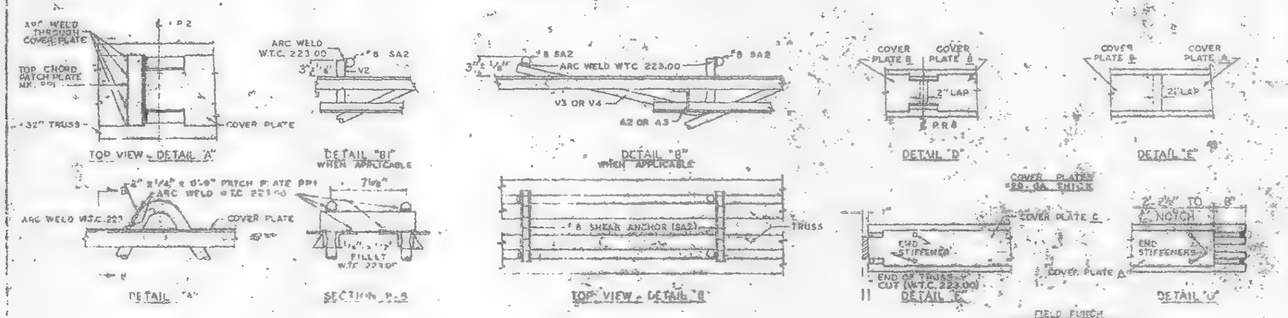


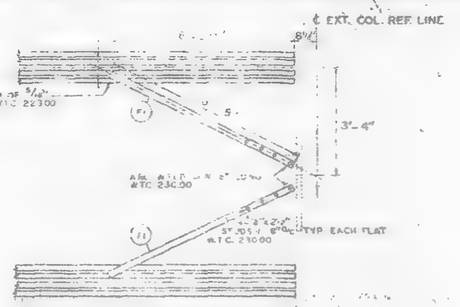
℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D1P SIZE 20' x 57'-7"

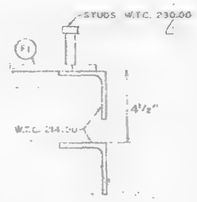








TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

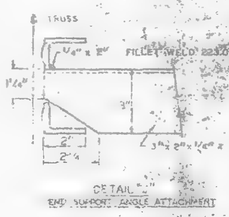


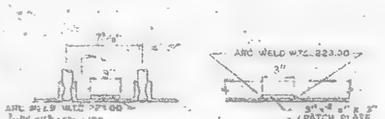
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	SPEC.
FLOOR TRUSSES	T1P	1	C32T1P - 57'-7"	ST 1-1
	T2P	1	C32T2P - 57'-7"	ST 202
	T7P	2	C32T7P - 57'-7"	ST 207 P
	T8P	2	C32T8P - 57'-7"	ST 208 P
BRIDGING TRUSSES	T10	1	24T10 - 10'-11"	ST 2-10
	T10A	1	24T10A - 10'-11"	ST 2-10A
	T10B	1	24T10B - 10'-11"	ST 2-10B
	T16	1	24T16 - 10'-11"	ST 216
5" x 5" x 5/8" ANGLE	A1	5	5" x 5" x 5/8" x 5'-10"	ST 403
	A2	4	5" x 5" x 5/8" x 5'-11"	ST 403
	A3	2	5" x 5" x 5/8" x 5'-11"	ST 403
DIAGONAL FLATS	F	6	1" x 8" x 5/8" x 6'-5"	ST 4A2
PATCH PLATES	PP1	18	1/2" x 8" x 1'-6"	ST 400
	PP2	16	1/2" x 8" x 2'-3"	ST 400
COVER PLATES	A	3	5/16" x .0135" x 10'-11 1/2"	ST 300
	B	6	5/16" x .0135" x 15'-2"	ST 303
	C	3	5/16" x .0135" x 13'-2 1/2"	ST 303
ANGLE CLIPS	C1	24	3" x 3" x 1/4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-6"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3'-6"	ST 295
	DUS-2	1	3 1/2" x 3 1/2" x 3'-6"	ST 295
CONNECTION BAR	CB	4	1" ø x 1'-3"	ST 400
	CB1	6	ø x 3'-...	ST 400
CONNECTION PLATES	P1	4	3/16" x 8" x 1'-8"	ST 400
	P2	1	4 3/8" x 39" x 8'-0"	ST 401
	P3	1	4" x 39" x 7'-10"	ST 401
	P4	3	6 1/2" x 1 1/8" x 0'-8"	ST 400
	P5	1	4 1/2" x 39" x 9'-0"	ST 401

NOTES: (1) ALL MATERIAL TO BE MADE WITH LOW ALLOY HIGH STRENGTH STEEL CONFORMING TO ASTM A572 GRADE 50 OR A588 GEN RODS IN THE C-7D SERIES OR EQUA.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

NO.	DATE	REVISION
1	8-10-89	AS NOTED





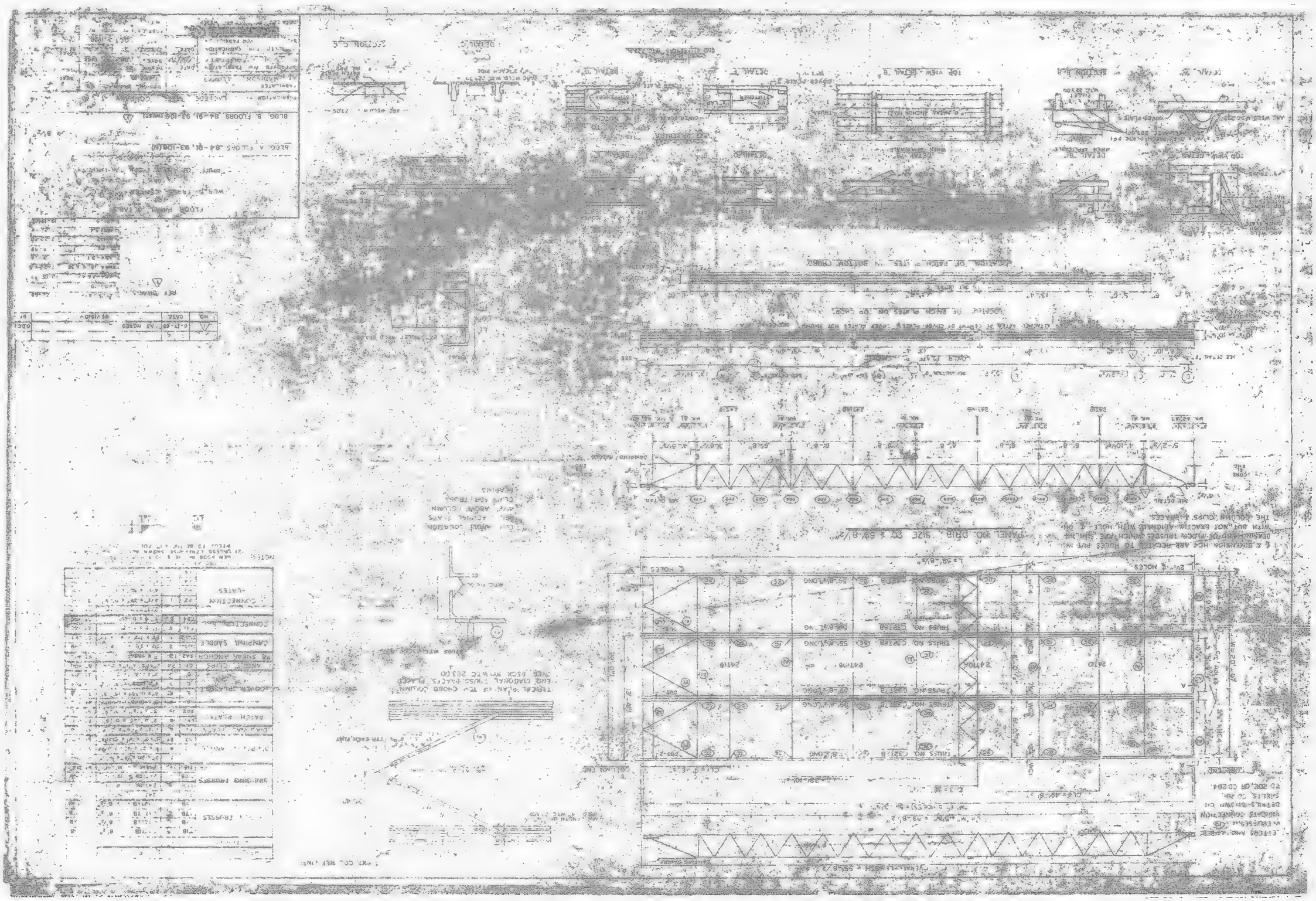
⚠ REF. DRWGS. [illegible]

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 74 (N)
PANEL D1P
BLDG. B FLOORS 74 (WEST) ⚠

FABRICATED BY THE LEE STEEL COMPANY
FABRICATED AT VIDALIA, LA.
DESIGN DRAWING NO. 7-A88-1
DATE 1-24-1989
CHECKED BY THOMAS
DATE
FABRICATION STARTED
FABRICATION COMPLETED
SHEET NO. 29
TOTAL SHEETS 43
PANEL NO. D1P

LACKAWANNA CO.



LETTERS AND NUMBERS IN ELLIPSES (A) (C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

OVERALL LENGTH = 59'-9"

CAMPING SADDLE

L = "A" & 5'-8" = 59'-9"

"M" = NO. HOLES (57) = 55'-1 3/4"

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/2"

CL2 = 22'-10 1/2"

CL1 = 9'-6 1/2"

CORE END

COLUMN END

TRUSS NO. C3217A 59'-9" LONG

TRUSS NO. C3217A 59'-9" LONG

TRUSS NO. C3217A 59'-9" LONG

TRUSS NO. C3217A 59'-9" LONG

TRUSS NO. C3217A 59'-9" LONG

DUS-2

DUS-1

24T10

24T10A

24T10B

24T16

13'-4"

20'-0"

6'-8 1/2"

8 1/2" ℄ HOLES

L = 59'-9"

℄ & DIMENSION NOS. ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIA SIZE 20' x 59'-9"

SEE DETAIL "B"

SEE DETAIL "C"

CAMPING SADDLE

COLUMN END

5'-3" 4'-10 1/2" 6'-8" 8'-8" 6'-8" 6'-8" 6'-8" 5'-8" 6'-8" 3'-6 1/2" 4'-6 1/2"

24T10 24T10B 24T19

COVER PLATE PLACEMENT

SEE DETAIL "A" SEE DETAIL "B" SEE DETAIL "C" SEE DETAIL "B"

13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/4"

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN SEE DETAIL "A"

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON TOP CHORD

5'-0" 13'-4" 13'-4" 3'-4" 1'-0"

SEE DETAIL C

LOCATION OF PATCH PLATES ON BOTTOM CHORD

LOCATION OF HOLES

℄ EXT. COL. REF. LINE

MIN. LENGTH OF WELD = 6" W.T.C. 223.00

ARC WELD MIN 6" LONG W.T.C. 223.00

TYP. EACH END

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK, BY W.T.C. 228.00

STUDS W.T.C. 230.00

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL			
FLOOR TRUSSES			
DIAGONAL			
3"x2"x1/4" ANGLE			
DIAGONAL			
PATCH PLATES			
COVER PLATES			
ANGLE CLIPS			
3/4" SHEAR ANCHOR			
CAMPING SADDLE			
CONNECTION BAR			
CONNECTION PLATES			

NOTES: (1) ALL SRC WELDS TO BE MADE WITH LINCOLN GEM RODS IN THE E-70 SERIES OR EQUIVALENT.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION WELDS TO BE 1/4" x 1" FULL WELD ALL AROUND.

℄ L

ARC WELD W.T.C. 223.00

42" TRUSS

COVER PLATE

TOP VIEW - DETAIL "A"

DETAIL "B" WHEN APPLICABLE

3/4" x 1/4" x 0'-8" PATCH PLATE PP1

ARC WELD W.T.C. 223.00

ARC WELD W.T.C. 223.00

COVER PLATE

FILLET W.T.C. 223.00

DETAIL "A"

SECTION B-B

3/4" SAB

ARC WELD W.T.C. 223.00

V3 OR V4

A2 OR A3

DETAIL "B" WHEN APPLICABLE

3/4" SAB SHEAR ANCHOR (SA2)

TRUSS

COVER PLATE B

TOP VIEW - DETAIL "B"

COVER PLATE B COVER PLATE A

2" LAP

DETAIL "D"

COVER PLATE B COVER PLATE A

2" LAP

DETAIL "E"

4" 1'-9"

END STIFFENER

COVER PLATE C

DETAIL "F"

COVER PLATES 29 GA. TRUSS

2-2 1/4" TO 8" ℄ NOTCH

END STIFFENER

COVER PLATE A

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

MK. A2 3"x2"x1/4" ANGLE MK. A3

SEE DETAIL "J"

SECTION A-A END SUPPORT ANGLE

7 1/8"

3"

ARC WELD W.T.C. 223.00 EACH SIDE

DETAIL "C"

ARC WELD W.T.C. 223.00

3"x3 1/8"x 1/4" PATCH PLATE MK. PP2

SECTION C-C

TRUSS

1/4" x 2" FILLET WELD 223.00

3"

2"

2 1/2"

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION
1	8-17-89	AS NOTED

REF. DRWGS.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 42-58 60-66 & 68-69 (NORTH) PANEL DR...

BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49-...(WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7.6/5.10

APPROVED FOR FABRICATION BY ... FOR PONY & ... DATE ... DRAWN ... DATE ...

APPROVED FOR FABRICATION BY ... FOR FABRICATION DATE ... CHECKED ... DATE ...

DETAILED ... CHECKED ...

PANEL NO. DRIC SIZE 20' x 4'-8"

* DIMENSION NC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR BUT NOT EXACTLY ALIGNED WITH HOLES IN COLUMN CLIPS & BRACES.

TYPICAL BEAM TO TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 22700

NO.	DATE	REVISION	BY
1	6-17-69	AS NOTED	GDC

REF DRWGS:

1-A89-5.6.11	1-22-68
1-B3.10	10-[illegible]
1-A84-34.40	10-1-[illegible]
1-A84-13.16.A.39	7-22-68
1-B84-3.1	1-3
56-1124	1-5-68
1-A81-3	7-22-68
1-A81-3.1	7-22-68
1-A81-8	10-18-68

BLDG. A FLOORS 50-58, 60-86, 68-74, 80-91, 93-108 (S)

BLDG. B FLOORS 50-58, 60-74, 80-91, 93-108 (EAST)

FABRICATED BY LACLEDE STEEL COMPANY

AT MADISON, ILLINOIS

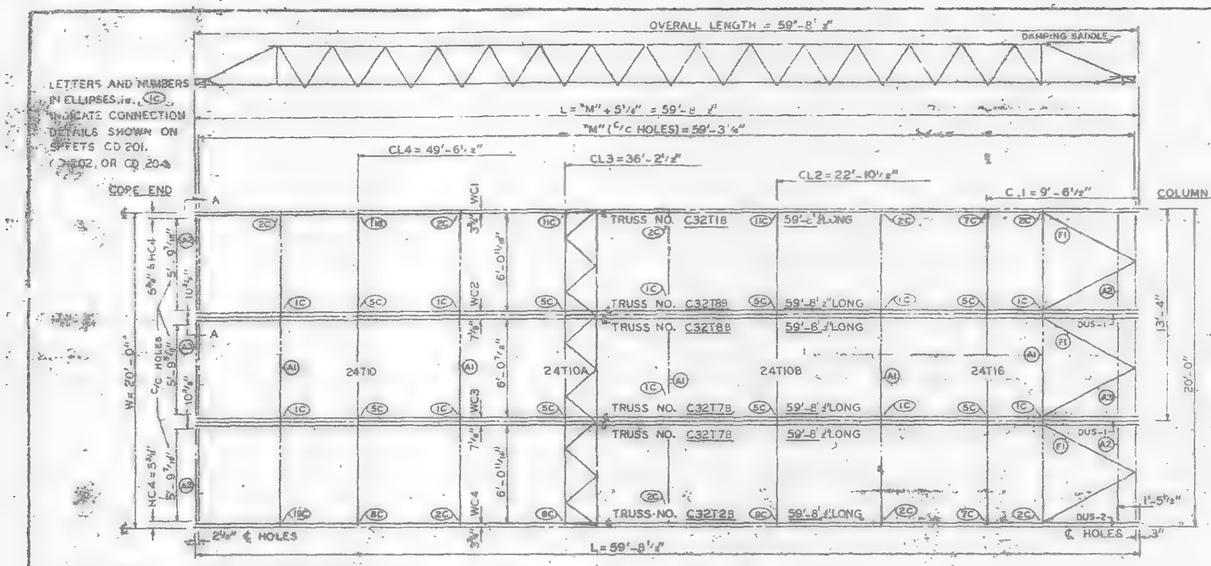
DESIGN DRWG. NO. A89-10

DATE 1/1/70

CHECKED

OCT 31, 1968

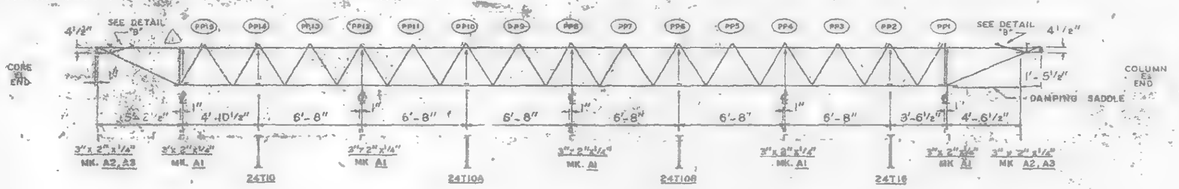
LACLEDE STEEL CO.

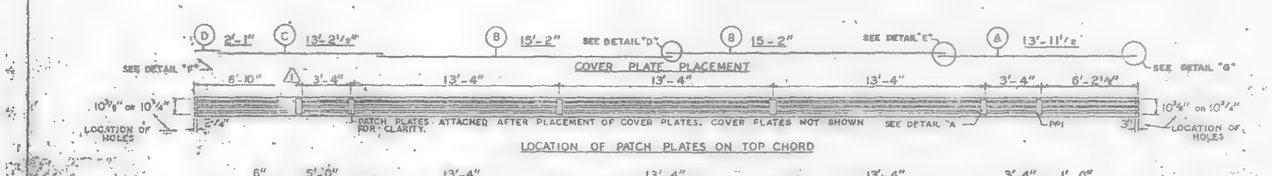


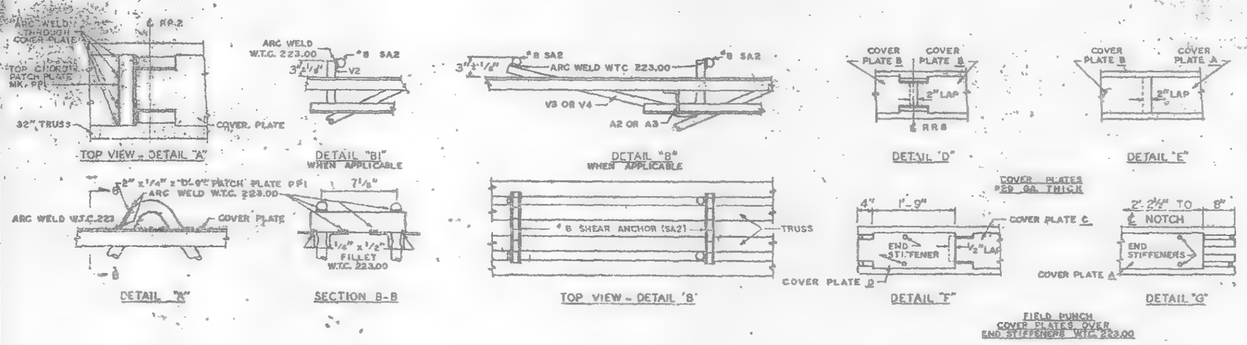
LETTERS AND NUMBERS IN ELLIPSES i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 203.

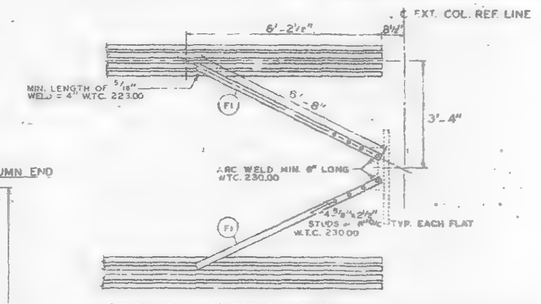
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D5B SIZE 20' x 59'-8 1/2"

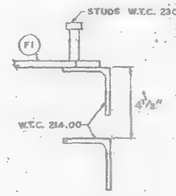








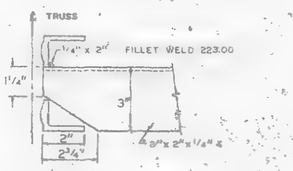
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

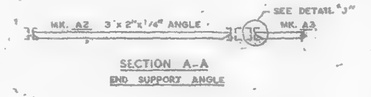


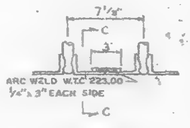
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

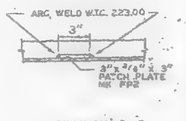
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG
FLOOR TRUSSES	T1B	1	C32T1B - 59'-8 1/2"	ST 2018
	T2B	1	C32T2B - 59'-8 1/2"	ST 2027
	T7B	2	C32T7B - 59'-8 1/2"	ST 2078
	T8B	2	C32T8B - 59'-8 1/2"	ST 2088
BRIDGING TRUSSES	T1O	1	24T1O - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T1C - 19'-11"	ST 216
3" x 2" x 1/16" ANGLE	A1	5	3" x 2" x 1/16" x 19'-1"	ST 402
	A2	4	3" x 2" x 1/16" x 5'-11 15/16"	ST 403
	A3	2	3" x 2" x 1/16" x 5'-11 15/16"	ST 403
DIAGONAL FLATS	F1	8	1" x 5'-6" x 2"	ST 402
PATCH PLATES	PP	18	2" x 1/4" x 0'-6"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	8" x .0135" x 19'-1"	ST 303
	B	8	8" x .0135" x 19'-2"	ST 303
	C	3	8" x .0135" x 13'-2 1/2"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 304
ANGLE CLIPS	C1	24	2" x 4" x 1/4" x 0'-8"	ST 400
3/8" SHEAR ANCHOR	SA2	12	3/8" ø RSBAS x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3'-4 1/2"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3'-0 1/2"	ST 298
CONNECTION BAR	CB1	4	1" ø x 1'-3"	ST 400
	CB4	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/16" x 5 1/4" x 8 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	6 1/2" x .39" x 1'-0"	ST 400
	P4	3	6 1/2" x 3 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .39" x 0'-9"	ST 401

NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.









NO.	DATE	REVISION	BY
2	7-1-69	AS NOTED	G.D.
1	3-11-69	AS NOTED	G.D.

REF. DRWGS.

7-A82-0 & 11	7-22-68
7-A83-71	11-25-68
7-A84-3	10-15-68
7-A8 8-19 & 18	7-22-68
7-A84-42	11-6-68
56-126	10-11-68
7-381-2	10-15-68
7-381-54	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83 (NORTH)

PANEL D5B - 20' x 59'-8 1/2"

BLDG. B FLOORS 83 (WEST) (A)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-A83-71

PLATE

APPROVED FOR FABRICATION BY: PORT AUTH. OF N.Y.&N.J. DATE

DRAWN BY: G.C.C. DATE JAN 14, 1969

APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE

CHECKED BY: T.H. CHURA DATE JAN 16, 1969

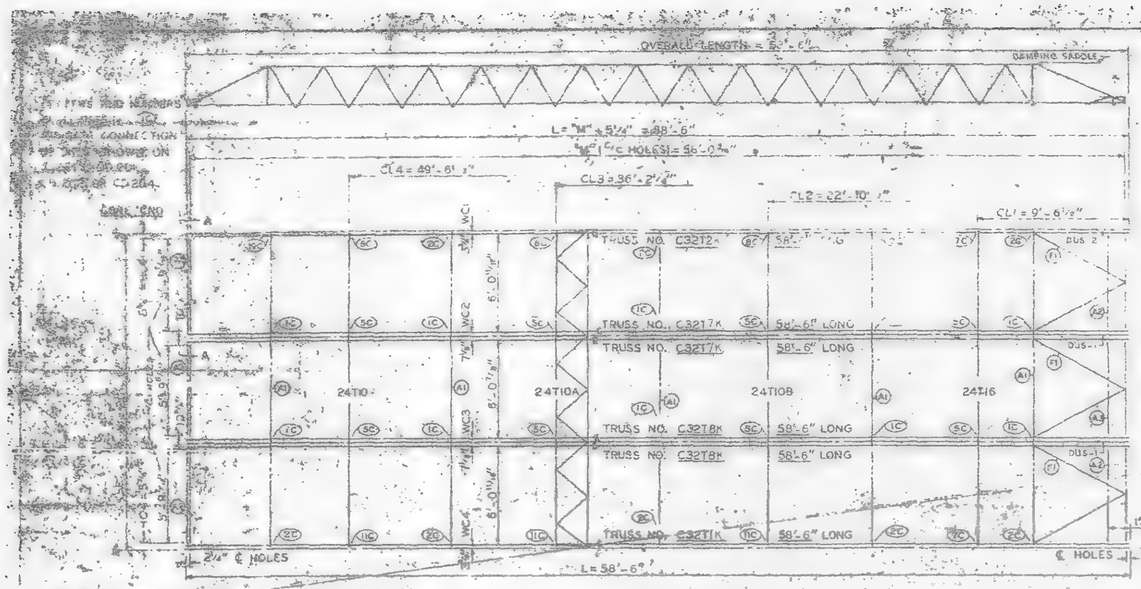
IN CHARGE OF PROD. DEV.

DETAILED [illegible]

FABRICATION CONT. NO. W.T.C. 221

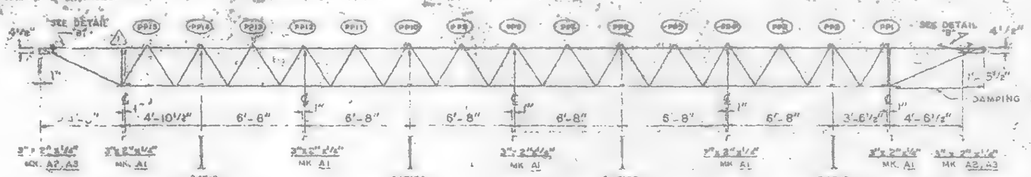
SHEET NO. FB 0'-8

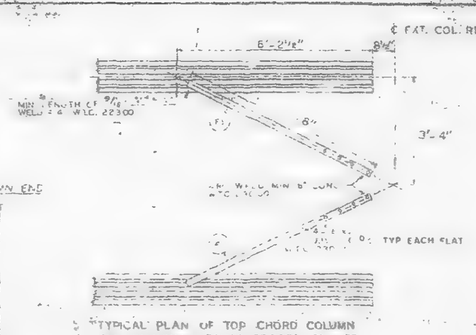
RECORDED

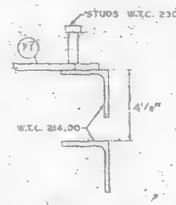


℄ DIMENSION "C4" ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DR5K SIZE 20' x 58'-6"



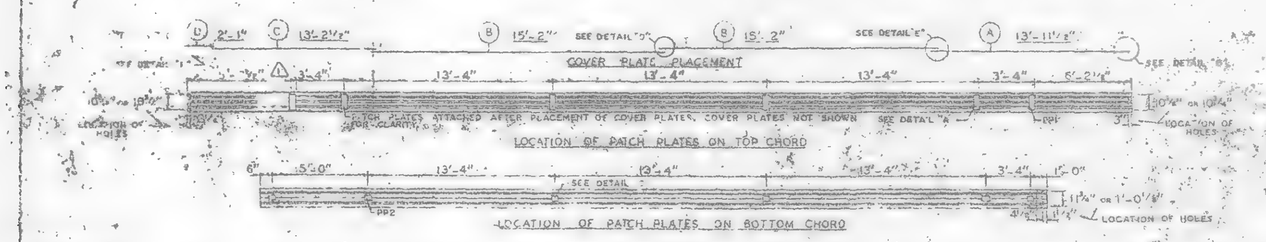


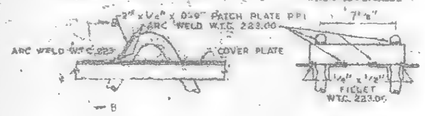


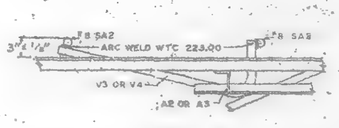
SEE ANGLE LOCATION FOR DIAGONAL FLATS 6 1/2" ABOVE ASSUMED CLIPS FOR TRUSS BEARING.

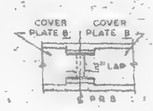
REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T1K	1	C32T1K - 58'-6"	ST 201K
	T2K	1	C32T2K - 58'-6"	ST 202K
	T7K	7	C32T7K - 58'-6"	ST 207K
	T8K	2	C32T8K - 58'-6"	ST 208K
BRIDGING TRUSSES	T1C	1	24T10 - 9'-11"	ST 210
	T1CA	1	24T10A - 18'-1"	ST 210A
	T1CB	1	24T10B - 13'-11"	ST 210B
	T1CE	1	24T16 - 19'-10"	ST 216
ANGLES	A1	5	3" x 2 1/2" x 4 1/16"	ST 403
	A2	4	3" x 2 1/2" x 5'-0"	ST 403
	A3	2	3" x 2 1/2" x 5'-10"	ST 403
DIAGONAL FLATS	F1	8	1 1/2" x 3 1/2" x 8'-0"	ST 402
FLATS	FP1	18	2" x 1" x 1'-0"	ST 402
	PP2	18	3" x 2 1/2" x 0'-1"	ST 402
COVER PLATES	A	3	5'-6" x .0135" = 13.1654#	ST 103
	B	4	5'-6" x .0135" x 16'-2"	ST 303
	C	3	9'-3" x .0135" = 13.2#	ST 303
	D	3	8'-3" x .0135" x 2'-1"	ST 103
ANGLE CLIPS	C1	24	2 1/2" x 4" x 1/2" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	9	7/8 DIA. x 0'-5"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 7" x 3" x 1'-0"	ST 208
	DUS-2	1	3 1/2" x 7" x 3" x 1'-6"	ST 208
CONNECTION BAR	CB	4	1" x 2" x 1'-3"	ST 400
	CB4	6	1" x 2" x 10"	ST 400
CONNECTION PLATES	P1	4	3/8" x 3 1/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x 39" x 0'-9"	ST 400
	P3	1	4 1/2" x 39" x 1'-0"	ST 400
	P4	3	6 1/2" x 1 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x 30" x 0'-9"	ST 400

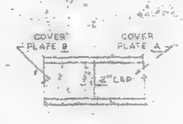
NOTES:
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 4" FULL LENGTH FILLET



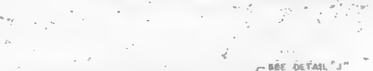


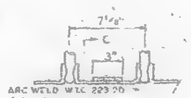


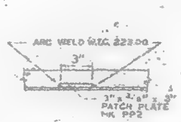


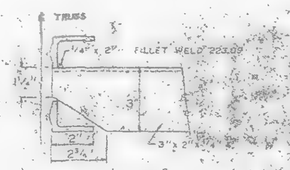


FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00









NO.	DATE	REVISION	
2	7-1-68	AS NOTED	G.C.
1	3-11-68	AS NOTED	G.C.

REF DRWGS.

2-AB3-5 & 11	7-12-68
2-AB3-[illegible]	1-25-68
2-AB4-3	10-15-68
2-AB4-15 & 18	1-25-68
2-AB4-42	10-15-68
2-AB1-24	10-1-68
2-AB1-5	10-15-68
2-AB1-A [illegible] 4	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 & 46 (SOUTH)

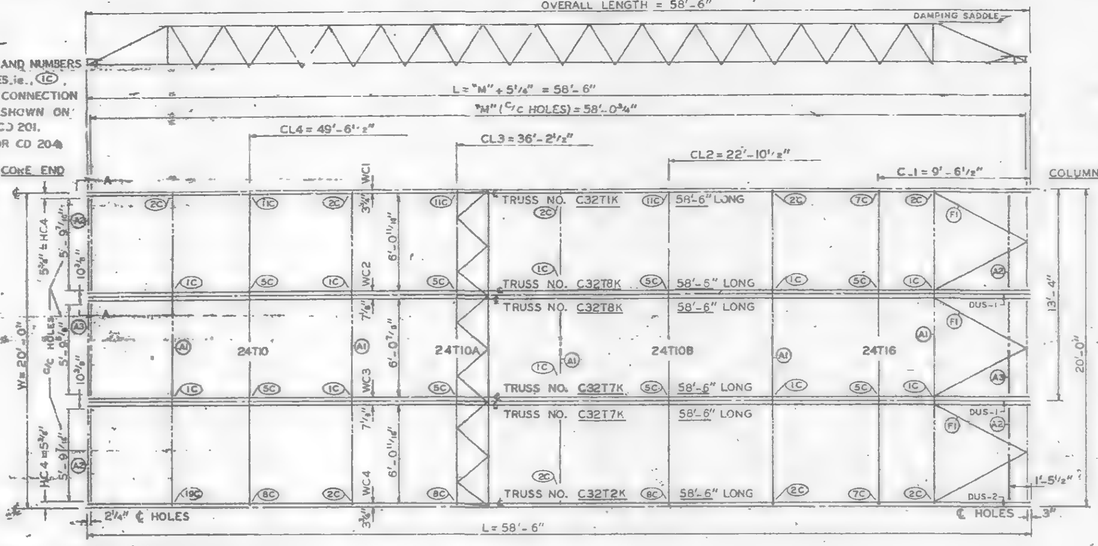
PANEL DR5K

BLDG. B FLOORS 45 & 46 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

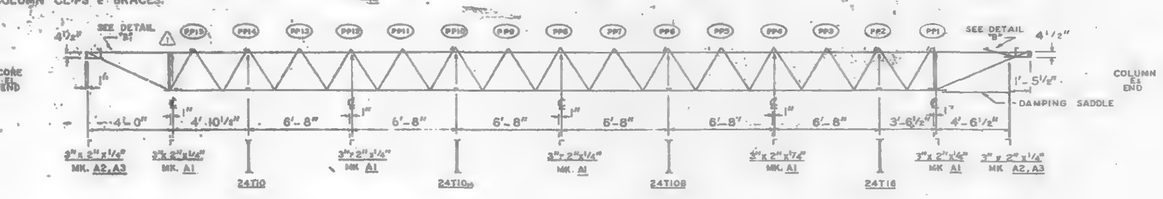
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 1-AB3 SH. 4-1-68	PLATE
APPROVED FOR FABRICATION BY [illegible]	DATE 1/12/70	DRAWN BY [illegible] DATE JAN 4 '70	
APPROVED FOR FABRICATION BY [illegible]	DATE	CHECKED BY T.Y.C. [illegible] DATE 1-14-70	
[illegible]		FABRICATION CONT. NO. [illegible]	

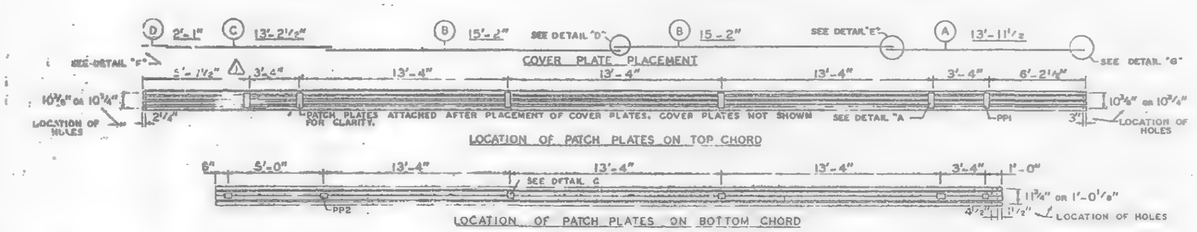
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

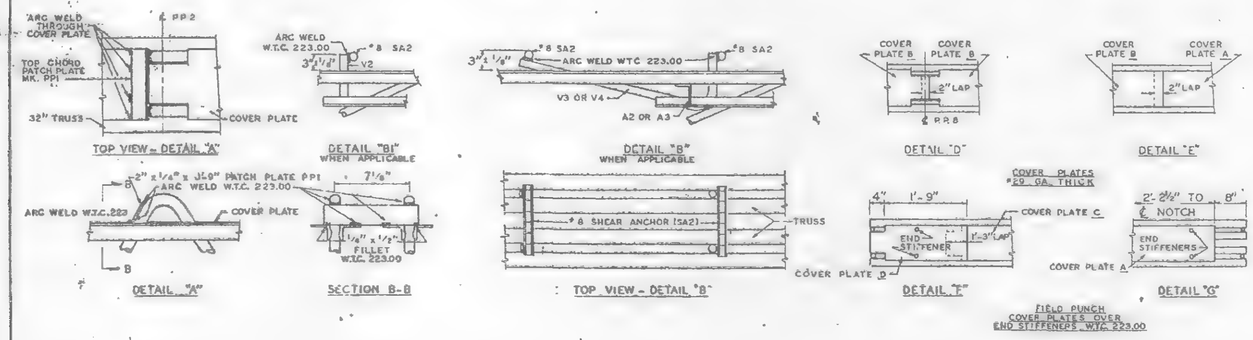


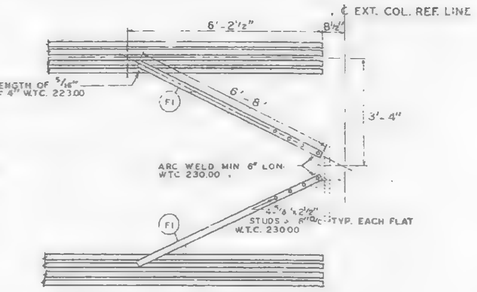
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D5K SIZE 20' x 58'-6"

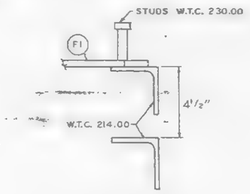








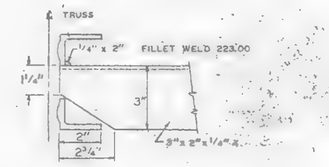
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

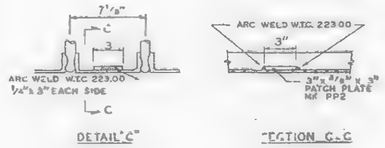
REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T1K	1	C32T1K - 58'-6"	ST 201K
	T2K	1	C32T2K - 58'-6"	ST 202K
	T7K	2	C32T7K - 58'-6"	ST 207K
	T8K	2	C32T8K - 58'-6"	ST 208K
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 5/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 5/16"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	16	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 9/16"	ST 303
	B	6	9" x .0135" x 19'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2 1/2" x 1 1/2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 B REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3 1/2" x 3/8" x 3'-8 3/4"	ST 288
	DUS-2	1	3/16" x 3 1/2" x 3/8" x 3'-8 3/4"	ST 288
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	8	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-8"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .30" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-90 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE



NO.	DATE	REVISION	BY
2	7-1-69	AS NOTED	GD
1	3-11-69	AS NOTED	GE

REF. DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-[illegible]	11-25-68
7-AB4-3	10-14-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SK-124	10-11-68
7-AB1-5	10-15-68
7-AB1-2 & 3	7-22-68

FLOOR PANEL DETAILS

WORLD TRADE CENTER - N.Y.C.

FOR

THE PORT OF NEW YORK AUTHORITY

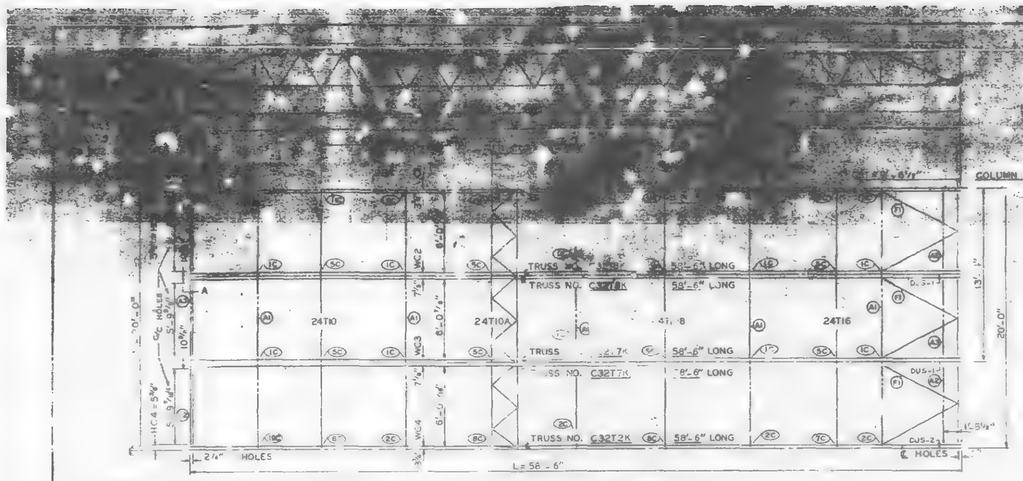
BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)

PANEL DEPTH 20'-0 3/8"

BLDG. B FLOORS 45 (EAST & WEST) 46 (EAST) 2

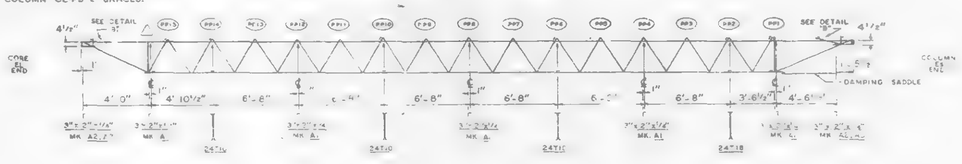
FABRICATION BY LACLEDE STEEL COMPANY

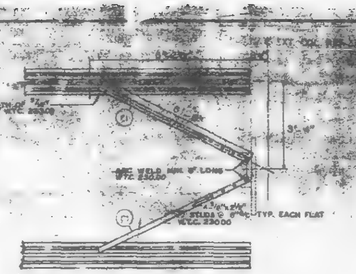
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB2-71	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR KAHN & [illegible] DATE	DRAWN BY gdc DATE JAN 14, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE	CHECKED BY: T.M.CHURA DATE JAN 14, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible] CARL INGER [illegible]	FABRICATION CONT NO W.T.C. 221	SHEET NO FP D5K

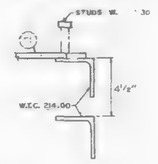


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D5K SIZE 20'-0" x 58'-6"



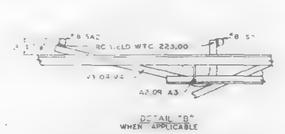


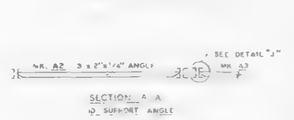


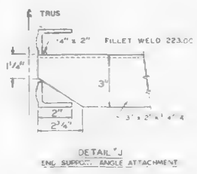
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

PATCH PLATES	PP1	1		ST 400
	PP2	1		ST 400
COVER PLATES	B	2		ST 303
	C	2		ST 313
	A	2		ST 324
ANGLE CLIPS	C1	24		ST 400
⌀8 SHEAR ANCHOR	SA8	2		ST 400
DAMPING SADDLE	DUS-1	2		ST 328
	DUS-2	1		ST
CONNECTION PLATES	CB1	1		ST 400
	CB4	8		ST 400
	P1	4		ST 400
	P2	1		ST 400
	P3	1		ST 400
	P4	3		ST 400
	P5	1		ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 3" FULL THROAT FILLET.







NO	DATE	REVISION	BY
1	3-11-69	AS NOTED	SD

REF. DRWGS.

7-A82-9 & 11	7-[illegible]-68
7-[illegible]-7	7-[illegible]-68
7-A84-3	0 FP
7-A84-15 A & B	7-[illegible]-68
7-A84-42	10-[illegible]-68
57-12-	10-[illegible]-68
7-181-5	0-[illegible]-68
7-181-2 & 3	7-[illegible]-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

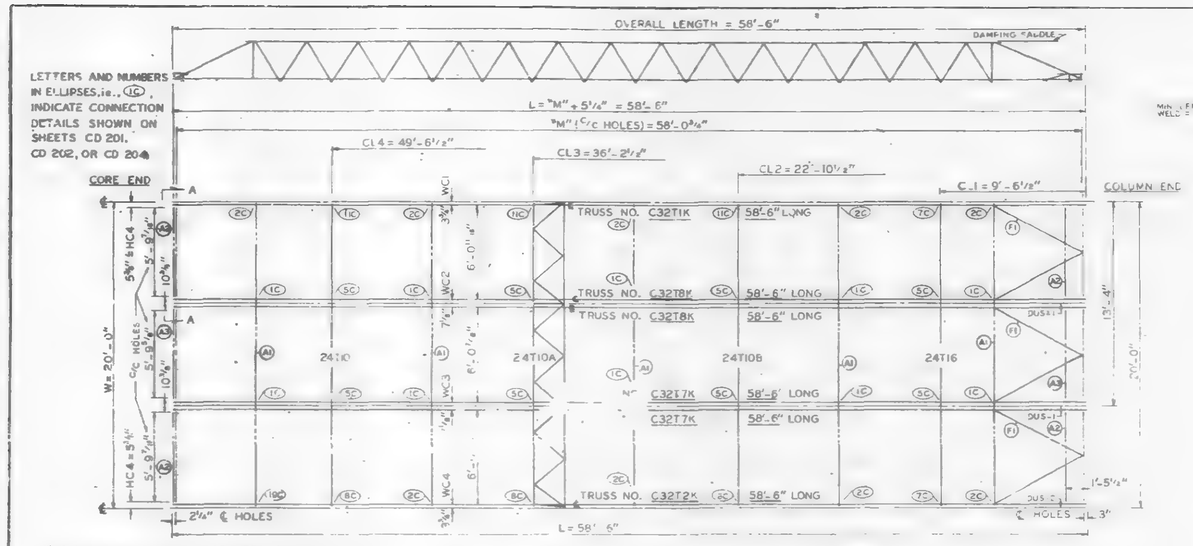
BLDG A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)

PANEL D5K - 20 x 58'-6"

FABRICATION BY LA. STEEL COMPANY
AT MADISON ILLINOIS
APPROVED FOR FABRICATION DATE 3/24/69
APPROVED FOR FABRICATION DATE
BY FOR FABRICATOR
DETAILED BY L. LARSEN

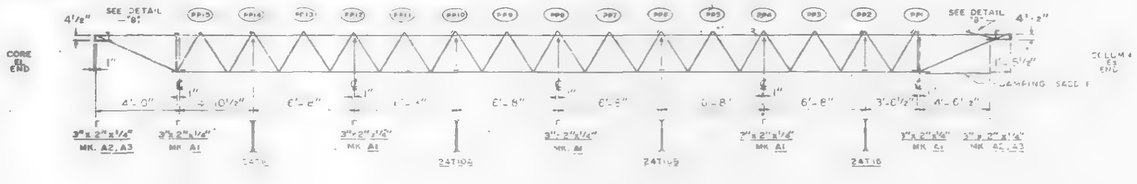
DESIGN DRAWING NO
DRAWN BY DATE JAN. 4, 1969
CHECKED BY DATE JAN. 14, 1969
FABRICATION CONT. NO W.T.C. 221

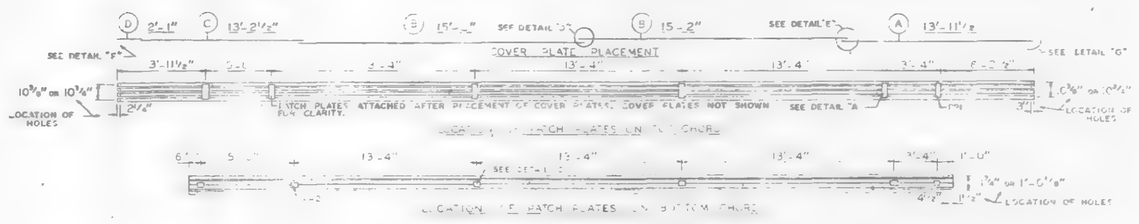
DATE
IN CHARGE PROD. DEV.
SHEET NO FP D5K

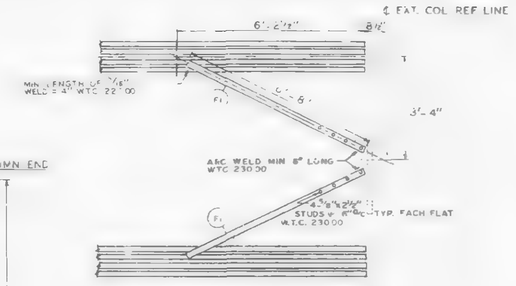


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

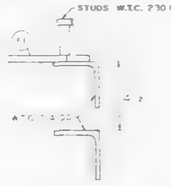
PANEL NO. D5K SIZE 20' x 58'-6"







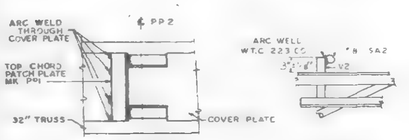
TYPICAL FLAT OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T1K	1	C32T1K - 58'-6"	ST 201K
	T2K	1	C32T2K - 58'-6"	ST 202K
	T7K	2	C32T7K - 58'-6"	ST 207K
	T8K	2	C32T8K - 58'-6"	ST 208K
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	BT 210
	T10A	1	24T10A - 19'-11"	BT 210A
	T10E	1	24T10B - 19'-11"	BT 210B
	T16	1	24T16 - 19'-11"	BT 216
3" x 2" x 1/4" ANGLE	A1	5	3' x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 8 7/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 19'-11 7/8"	ST 303
	B	8	9" x .0135" x 19'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/8"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 2" x 1/4" x 0'-8"	ST 400
℄ SHEAR ANCHOR	SA2	8	℄ 8 REBAR x 0'-9"	ST 400
CAMPING SADDLE	DS-1	2	3 1/2" x 3 1/2" x 2" x 3'-6 1/8"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 1 1/8" x 3'-6 1/8"	ST 298
CONNECTION BAR	CB1	4	1" ℄ x - 3"	ST 400
	CB4	6	1" ℄ x 0'-10"	ST 400
	P1	4	3/16" x 3" x 8 1/2"	ST 400
CONNECTION PLATES	P2	1	4 1/8" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .38" x 0'-9"	ST 401

NOTES: (1) WELDS TO BE MADE WITH LOW HYDRO. GEN RODS IN THE E-70 SERIES OR EQUA.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 5/16" x 1" FULL THROAT FILLET

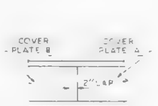


TOP VIEW - DETAIL "A"

DETAIL "B" WHEN APPLICABLE

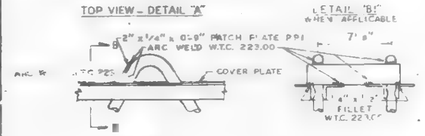
DETAIL "B" WHEN APPLICABLE

DETAIL "D"



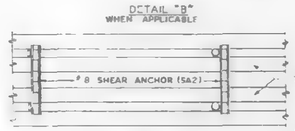
DETAIL "E"

SECTION A-A
END SUPPORT ANGLE

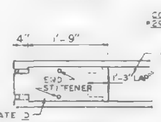


DETAIL "A"

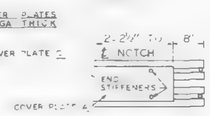
SECTION B-B



TOP VIEW - DETAIL "B"



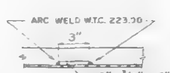
DETAIL "F"



DETAIL "G"

F.E.2 PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00

DETAIL "C"



SECTION C-C

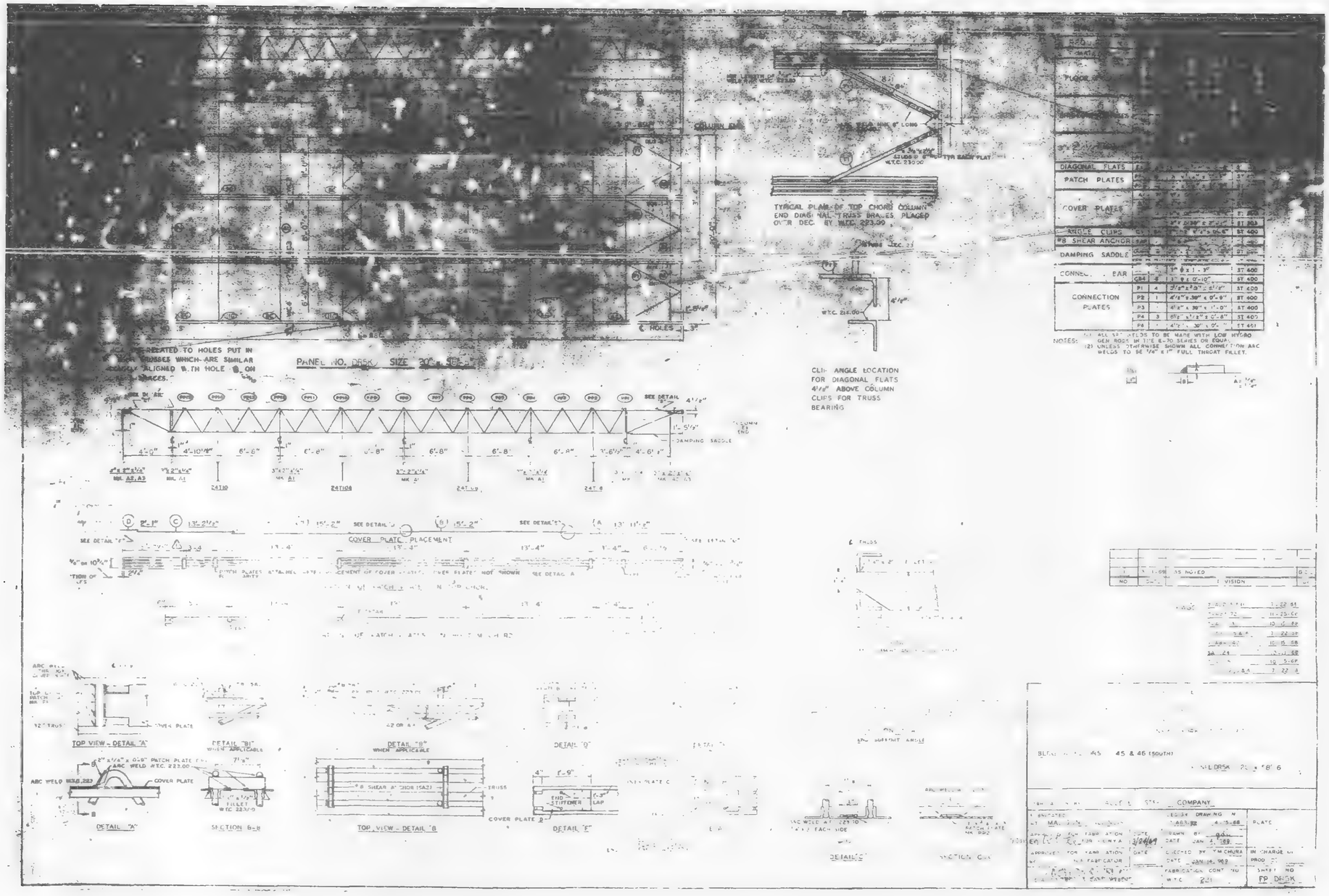
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

REF DRWGS.		
7-AB2-5 & 11	7-2c-68
7-AB3-71	11-2*-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-2c-68
7-AB4-42	10-15-68
SC-124	10-11-68
7-1B1-5	10-15-68
7-1B1-2 & 3	7-2c-68

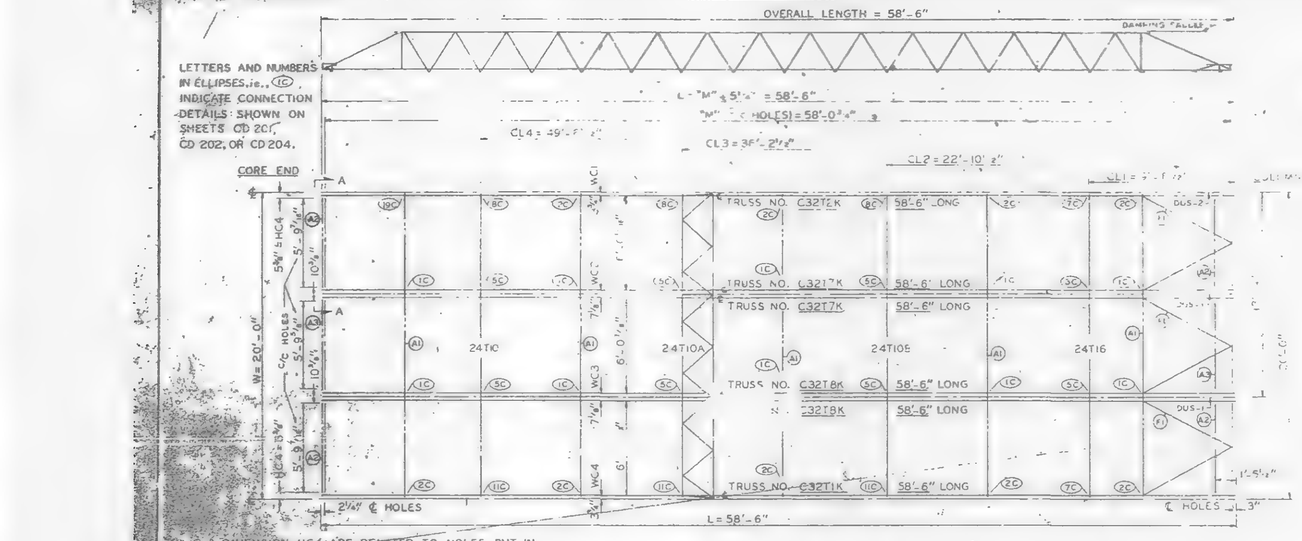
FLOOR PANEL DETAILS
FOR
AGRIC TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)
PANEL D5K - 20' x 58'-6"

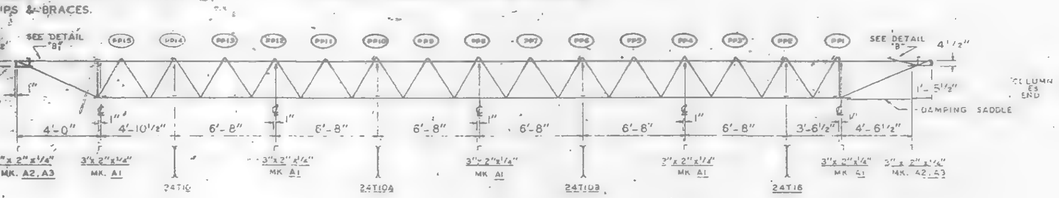
FABRICATION BY LACLEDE STEEL COMPANY		
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-71	DATE
APPROVED FOR FABRICATION FOR PONYA	DATE 2/4/69	DRAWN BY [illegible] DATE JAN. 14, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHIRA DATE JAN. 14, 1969
DETAILED BY A. CARL WEBER	FABRICATION CONT NO. W.T.C. 221	IN CHARGE OF PROD. DEV. SHEET NO. FP D5K

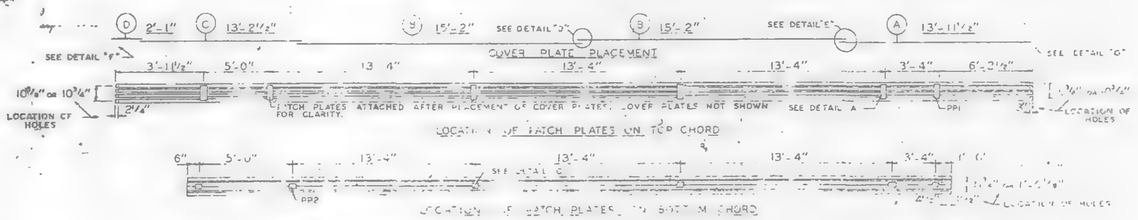

PANEL NO. D5K SIZE 30'-5½"
HOLES RELATED TO HOLES PUT IN TOP CHORD TRUSSES WHICH ARE SIMILAR EXACTLY ALIGNED WITH HOLE ON SPACES.
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DEC. BY WTC 223.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING
DIAGONAL FLATS
PATCH PLATES
COVER PLATES
ANGLE CLIPS
#8 SHEAR ANCHOR
DAMPING SADDLE
CONNECTION PLATES
NOTES:
(1) ALL WELDS TO BE MADE WITH LOW HYDROGEN ROOS WELDING ELECTRODES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.
COVER PLATE PLACEMENT
TOP VIEW - DETAIL "A"
DETAIL "B1" WHEN APPLICABLE
DETAIL "B" WHEN APPLICABLE
DETAIL "D"
DETAIL "A"
SECTION B-B
TOP VIEW - DETAIL "B"
DETAIL "E"
DETAIL F
SECTION C-C
COMPANY
DRAWING NO. A63-32
DATE JAN 1 '69
DRAWN BY
CHECKED BY
DATE JAN 14, 1969
FABRICATION CONTROL W.T.C. 221
PLATE
SHEET NO. FP D5K

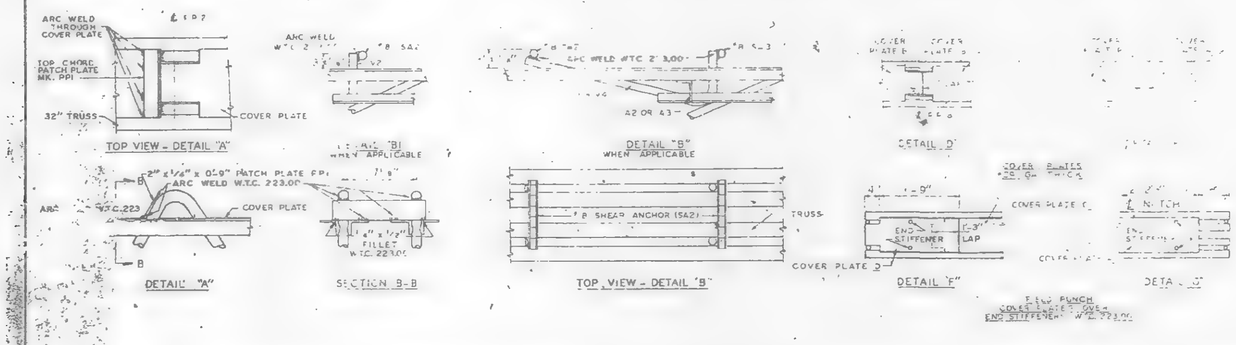
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

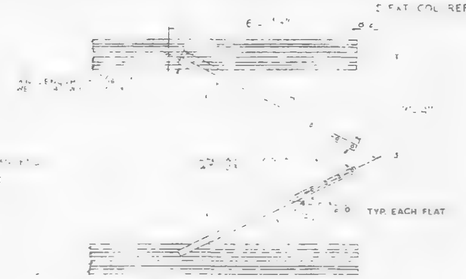


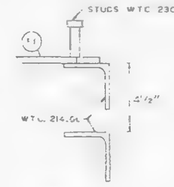
PANEL NO. DR5K SIZE 20' x 58'-6"











CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
BRIDGING TRUSSES	1K	1	C32T1K - 58' 6"	ST 201K
	2K	1	C32T2K - 58' 6"	ST 202K
	7K	2	C32T7K - 58' 6"	ST 207K
	8K	2	C32T8K - 58' 6"	ST 208K
	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T1C	1	24T16 - 19'-11"	ST 216
ANGLES	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
PLATES	P1	6	1' 2" x 3/8" x 6'-8"	ST 402
	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 3 1/2" x 1 1/4" x 0'-8"	ST 400
⌀8 SHEAR ANCHOR	SA2	8	⌀ 8, REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3½" x 3½" x 3½" x 3'-6½"	ST 298
	DUS-2	1	3½" x 3½" x 3½" x 3'-6½"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3'/2" x 2 1/2" x 0'-7 1/2"	ST 400
	P2	1	6½" x .30" x 0'-8"	ST 400
	P3	1	4½" x .30" x 1'-0"	ST 400
	P4	3	6½" x 1/2" x 0'-8"	ST 400
	P6	1	4½" x .30" x 0'-8"	ST 401

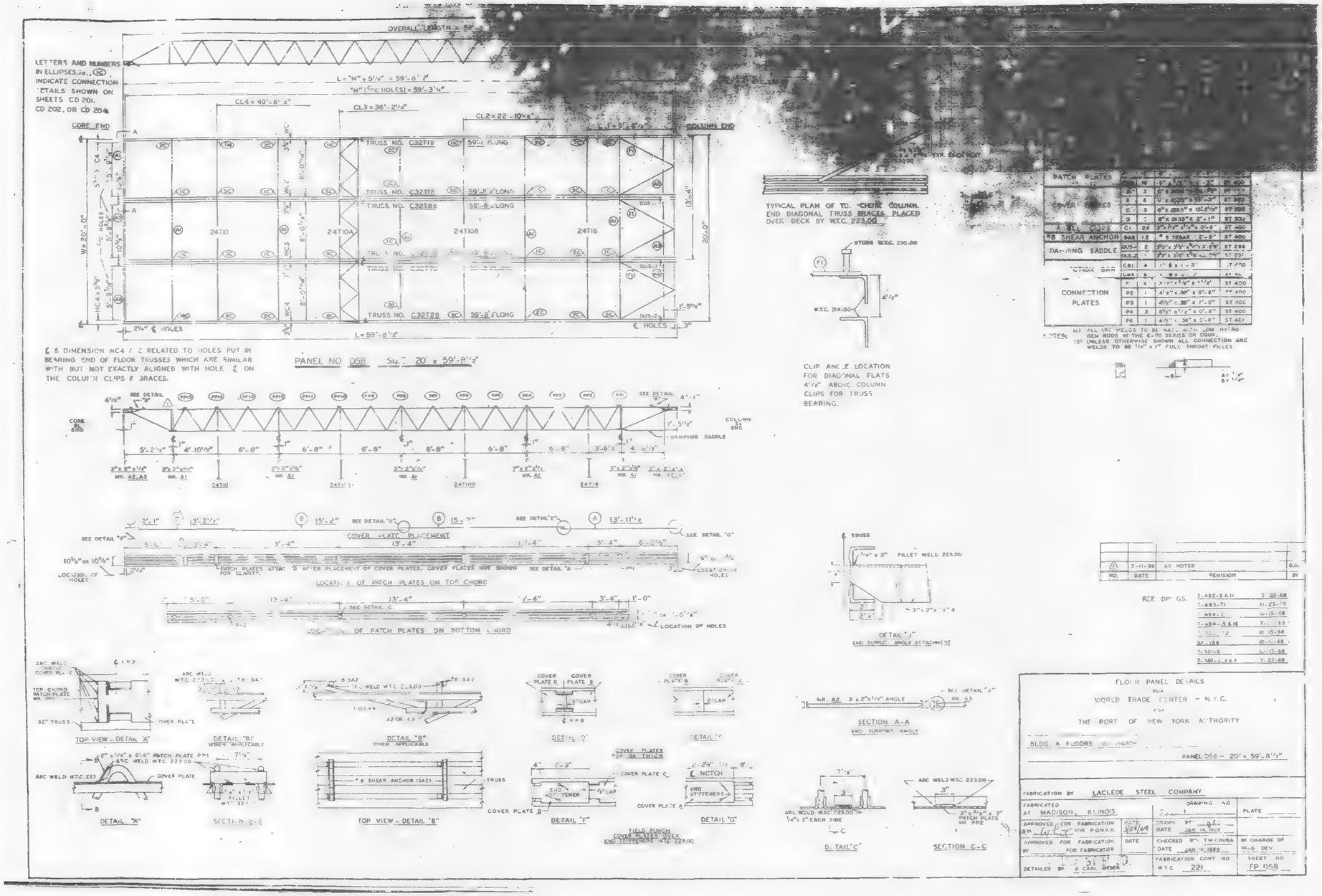
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

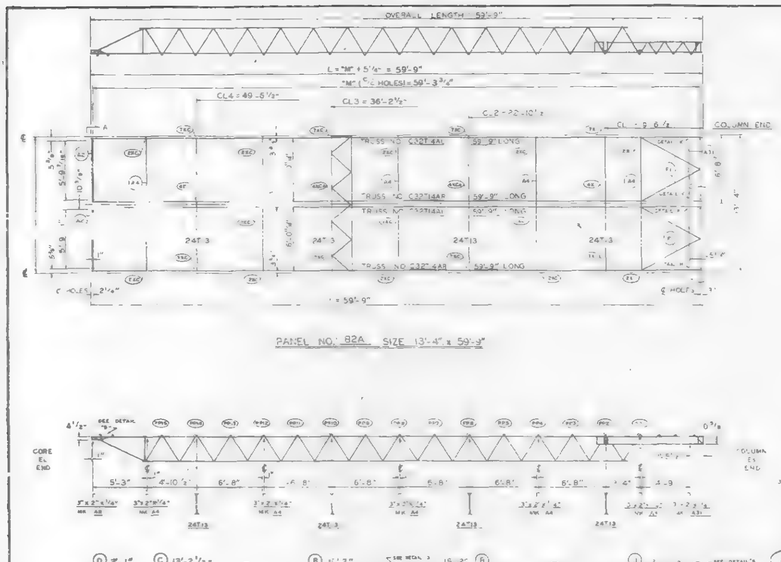
REF. DRWGS.		
	7-AB2-5 & 11	7-22-68
	7-AB3-72	11-25-68
	7-AB4-3	10-15-68
	7-AB4-15 & 16	7-22-68
	7-AB6-42	10-15-68
	SA-124	10-11-68
	7-AB1-5	10-15-68
	7-AB1-2, 3 & 4	7-22-68

PANEL DETAILS
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. & FLOORS 45 & 46 (SOUTH)
PANEL DR5K- 20' x 58'-6"

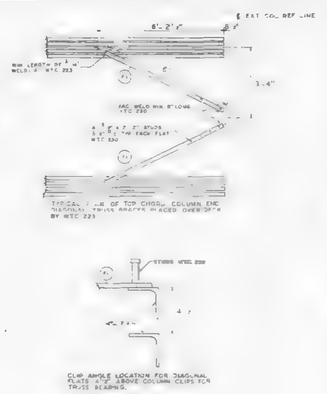
FABRICATED BY LADEDE STEEL COMPANY

FABRICATED AT - MADISON, ILLINOIS	DESIGN DRAWING NO. 7-AB3-172 4-15-68	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE 2/4/69	DRAWN BY gdc DATE JAN 14, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE	CHECKED BY T.M.CHURA DATE JAN. 14, 1969	IN CHARGE OF PROD. DEV
DETAILED BY CARL WEBER	FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP DR5K


OVERALL LENGTH = 59'-8 1/2"
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204
L = "M" + 5'-1/4" = 59'-8 1/2"
"M" (C/C HOLES) = 59'-3 1/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/8"
CL2 = 22'-10 1/8"
CL1 = 9'-6 1/8"
CORE END
COLUMN END
TRUSS NO. C32T18 59'-8 1/2" LONG
TRUSS NO. C32T28 59'-8 1/2" LONG
24T10
24T10A
24T10B
24T16
24T18
W = 20'-0"
13'-4"
20'-0"
L = 59'-8 1/2"
PANEL NO D5B SIZE 20' x 59'-8 1/2"
& DIMENSION NC4 / 2 RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE & ON THE COLUMN CLIPS & BRACES.
SEE DETAIL "B"
DAMPING SADDLE
COVER PLATE PLACEMENT
SEE DETAIL "A"
SEE DETAIL "B"
SEE DETAIL "C"
SEE DETAIL "D"
SEE DETAIL "E"
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
LOCATION OF HOLES
TYPICAL PLAN OF TO. "CHORD COLUMN. END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00
STUDS W.T.C. 230.00
W.T.C. 214.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-7/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
PATCH PLATES
COVER PLATES
CONNECTION PLATES
ANGLES
SHEAR ANCHORS
DAMPING SADDLE
SECTION BAR
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS AS THE E-70 SERIES OR EQUAL. (2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET
TOP VIEW - DETAIL "A"
DETAIL "B" WHEN APPLICABLE
DETAIL "A"
SECTION B-B
DETAIL "B"
TOP VIEW - DETAIL "B"
DETAIL "F"
DETAIL "G"
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00
SECTION A-A END SUPPORT ANGLE
D. TAIL "C"
SECTION C-C
DETAIL "J" END SUPPORT ANGLE ATTACHMENT
REVISION
REF. DRGS.
FLOOR PANEL DETAILS FOR WORLD TRADE CENTER - N.Y.C. FOR THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS
PANEL D5B - 20' x 59'-8 1/2"
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY THE P.O.N.Y.A.
APPROVED FOR FABRICATION BY FOR FABRICATOR
DETAILED BY A. CARL WEBER
DRAWING NO
PLATE
DRAWN BY
DATE JAN. 14, 1969
CHECKED BY T.M. CHUBA
DATE JAN. 14, 1969
FABRICATION CONT NO W.T.C. 221
SHEET NO FP D5B

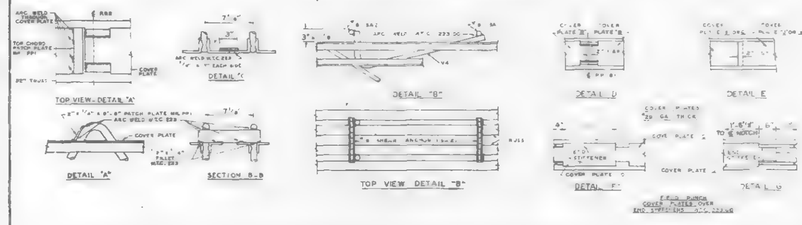


PANEL NO. B2A SIZE 13'-4" x 59'-9"



REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	THAM	2	C32T14AR x 59'-8"	ST 214AL
	THAM	2	C32T14AR x 59'-8"	ST 214AL
BRIDGING TRUSSES		4	24T13 x 13'-3"	ST 213
1" x 2"-6" x 1/4" ANGLE	A2	2	3"x2"x 1/4"x 6"-1 1/2"	ST 403
	A4	5	3"x2"x 1/4"x 13'-3"	ST 403
	A11	2	3 x 2" x 1/4" x 8'-8"	ST 4 0
CLOSURE PLATES	PP1	2	3"x 1/4" x 0'-2 1/2"	ST 4 3
PATCH PLATES	PP1	12	2" x 1/4" x 6'-3"	ST 400
	PP2	12	3" x 1/4" x 6'-3"	ST 400
COVER PLATES	B	4	8"x .0135" x 59'-3"	ST 303
	C	2	8"x .0135" x 13'-3"+2"	ST 303
	D	2	8"x .0135" 2'-1"	ST 303
	J	2	8"x 0.3" 13'-7 1/2"	ST 324
ANGLE CLIPS	C	8	2"x 1" x 2"-2 1/2" -8"	ST 400
⅞ SHEAR ANCHOR	SAC	4	⅞ REBAR x 1'-8"	ST 400
	C1	14	3"x 1" 1'-1"	ST 400
CONNECTION BAR	CB	1	1"x 6" x 7"	
CONNECTION PLATES	B	4	1'-1" x 8" W1C 10 1'-1"	ST 400
	P2	4	4'-1" x 18" x 0 3/8"	ST 400
	P3	4	4'-1" 18" x 0 3/8"	ST 400
	P6	4	5" 1'-11 1/2"	ST 403

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN ROD IN THE E 70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS SHOWN ON
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS 210 THRU 220.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE ¼" x 4" FULL THROAT FILLET.



NO	DATE	REVISION	BY

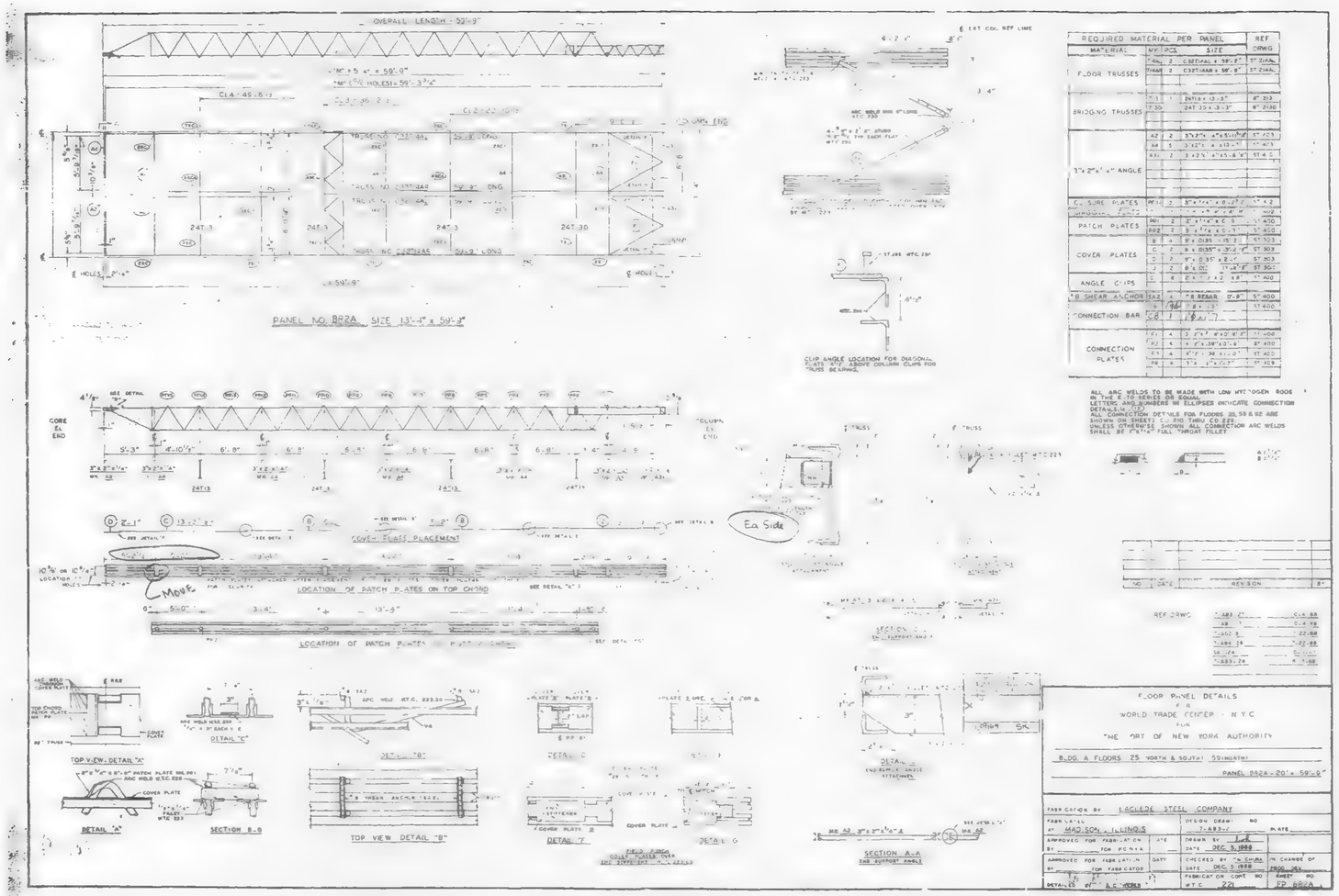
REF DRWG.	
7-383-08	10-4-68
7-A8 3	10 4 68
7-382 6	7-22-68
7-A54 28	7-2/ 68
1A-24	10-1-68
7-883-24	A-1-68

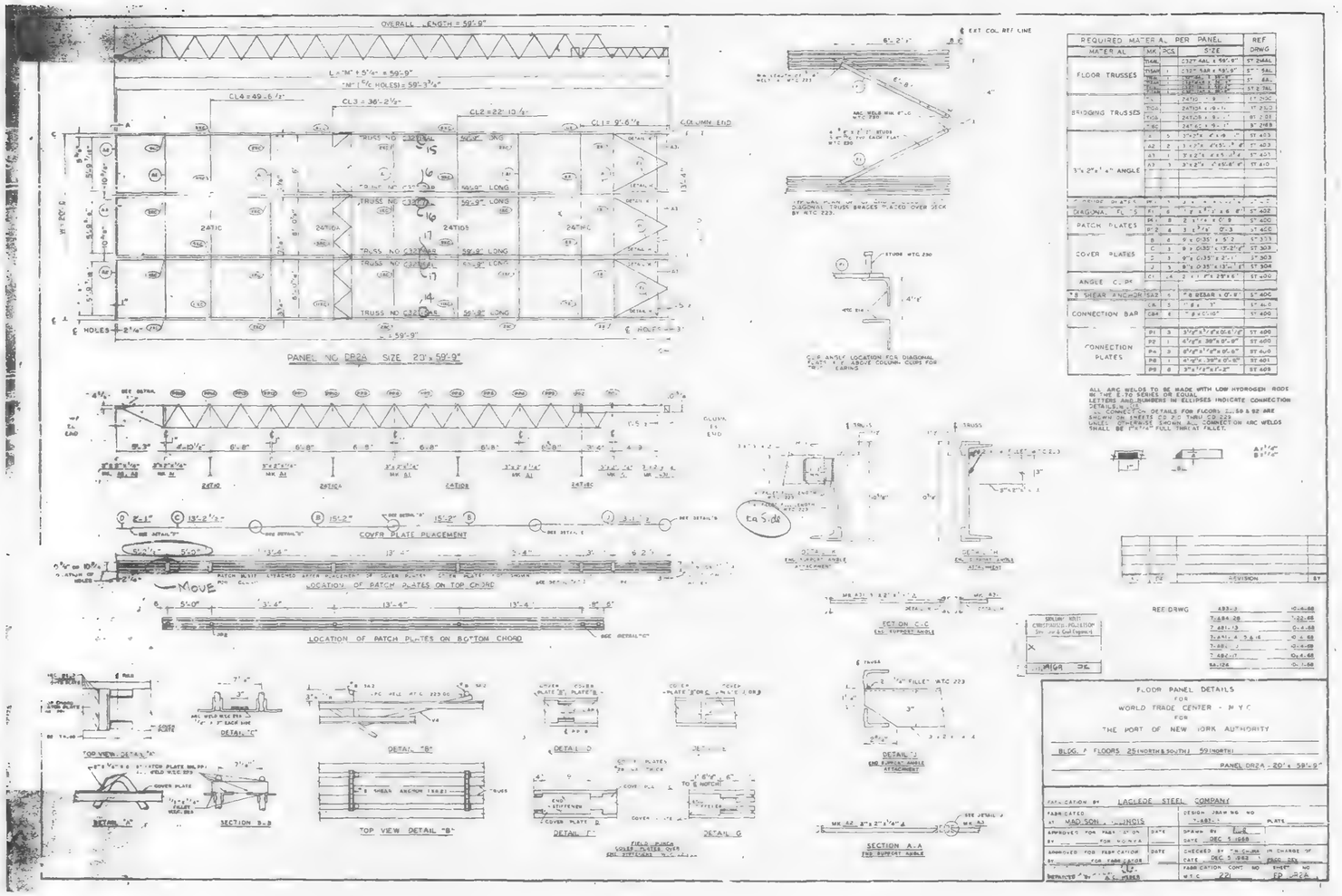
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
HE PO T OF NEW YORK AUTHORITY

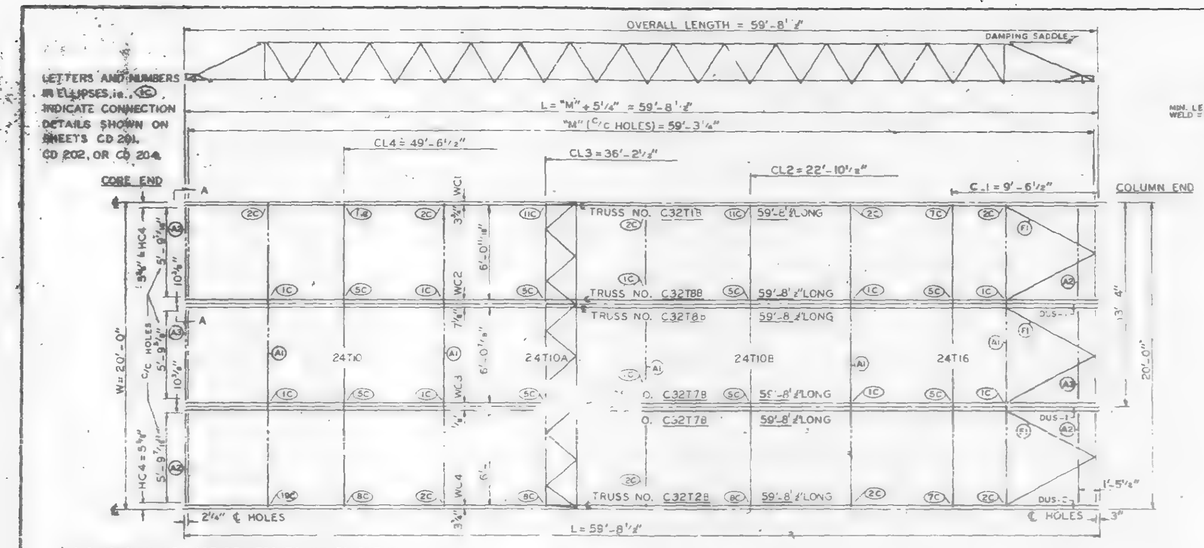
B.DG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL B2A - 20'-x 59'-9"

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING 7-A83-26	PLATE
APPROVED FOR FABRICATION BY	DATE	DRAWN BY	
FOR POWER		DATE DEC 5 968	
APPROVED FOR FABRICATION BY	DATE	CHECKED BY (CHIEF) IN CHARGE OF	
FOR FABRICATOR		DATE DEC 5 968	PROJ SEQ
DETAILED BY A.S. WEISS		FABRICATION CONT NO W1C 221	SHEET NO FP B2A


OVERALL LENGTH - 59'-9"
PANEL NO. BR2A SIZE 13'-4" x 54'-9"
FLOOR TRUSSES
BRIDGING TRUSSES
3"x2"x¼" ANGLE
CHORD SPLICE PLATES
PATCH PLATES
COVER PLATES
ANGLE CLIPS
¾ø SHEAR ANCHORS
CONNECTION BAR
CONNECTION PLATES
REQUIRED MATERIAL PER PANEL
MATERIAL
WK PCS
SIZE
REF DRWG
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS USED.
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 82 ARE SHOWN ON SHEET C-210 THRU C-225.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET
CORE EA END
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES BOTT. CHORD
Ea Side
Move
DETAIL "A"
TOP VIEW DETAIL "A"
SECTION B-B
DETAIL "C"
TOP VIEW DETAIL "B"
DETAIL "E"
DETAIL "F"
DETAIL "G"
SECTION A-A
END SUPPORT ANGLE ATTACHMENT
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 47" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 25 NORTH & SOUTH 59 NORTH
PANEL BR2A - 20'-1" x 59'-9"
FABRICATION BY LACLEDE STEEL COMPANY
AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY ____ FOR PCNYA
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR
DRAWN BY
DATE DEC. 3, 1968
CHECKED BY
DATE DEC. 3 1968
FABRICATOR CONT NO WTC 221
SHEET NO F7 BR2A-1
REVISION
REF DRWG

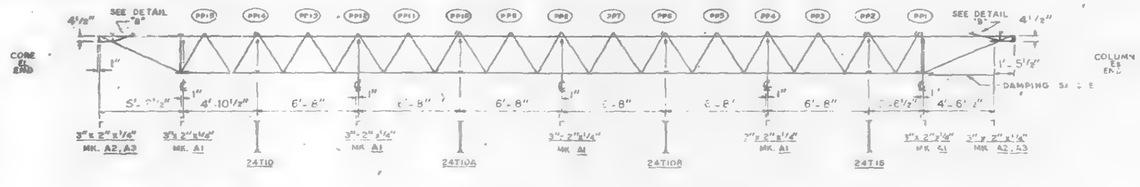

OVERALL LENGTH = 59'-9"
L = "N" + 5'-0" = 59'-9"
"N" = C/C HOLES = 59'-3 3/4"
CL4 = 49'-6 1/2"
CL3 = 36'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 9'-6 1/4"
COLUMN END
TRUSS NO C327AAL
TRUSS NO C327AAR
TRUSS NO C327AAS
TRUSS NO C327AAT
59'-9" LONG
24T1C
24T1CA
24T1D
24T1BC
PANEL NO DP2A SIZE 20' x 59'-9"
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
MOVE
DETAIL "A"
SECTION B-B
TOP VIEW DETAIL "B"
DETAIL "B"
DETAIL "C"
DETAIL "D"
DETAIL "E"
DETAIL "F"
DETAIL "G"
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
SECTION A-A
END SUPPORT ANGLE
SECTION C-C
DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.
STUDS WTC 230
CLIP ANGLE LOCATION FOR DIAGONAL BRACE "E" ABOVE COLUMN. CLIPS FOR EARING
ARC WELDS WITH 8" c/c WTC 230
EXT COL. REF. LINE
Ea Side
REQUIRED MATERIAL PER PANEL
MATERIAL | MK | PCS | SIZE | REF DRWG
FLOOR TRUSSES | T1AAL | 1 | C327" AAL x 59'-9" | ST 2AAL
T1AAR | 1 | C327" AAR x 59'-9" | ST " 2AL
T1AAS | 1 | C327" AAS x 59'-9" | ST " 2AL
T1AAT | 1 | C327" AAT x 59'-9" | ST " 2AL
BRIDGING TRUSSES | T1A | 1 | 24T1D - 9'-1" | ST 2D2C
T1CA | 1 | 24T1DA x 9'-1" | ST 2D2D
T1CB | 1 | 24T1DB x 9'-1" | ST 2D2E
T1BC | 1 | 24T1BC x 9'-1" | ST 2H8
3"x 2"x 1/4" ANGLE | A1 | 3 | 3"x2"x 4'-1 1/8" | ST 403
A2 | 2 | 3"x2"x 4'-5 3/8" | ST 403
A3 | 1 | 3"x2"x 4'-9 3/4" | ST 401
A3 | 3 | 3"x2"x 4'-10 1/8" | ST 410
DIAGONAL TRUSS BRACES | E1 | 1 | 3"x2"x 6'-8" | ST 402
PATCH PLATES | PP1 | 8 | 2 1/4"x 6'-9 | ST 400
PP2 | 6 | 3 1/2"x 0'-3 | ST 400
COVER PLATES | B | 4 | 9"x 0.135" x 59'-2 | ST 303
C | 3 | 9"x 0.280" x 17'-2 1/2" | ST 303
C | 3 | 9"x 0.135" x 2'-1 | ST 303
J | 3 | 8"x 0.135" x 13'-1 1/2" | ST 304
ANGLE CLIPS | C1 | 4 | 4"x 4"x 2 1/2"x 6" | ST 400
7/8 SHEAR ANCHORS | SA2 | 5 | 7/8 REBAR x 0'-8" | ST 400
CA | 5 | 7/8 x 3" | ST 400
CONNECTION BAR | CB4 | 4 | 8"x 0.135" | ST 400
CONNECTION PLATES | P1 | 3 | 3/8"x 3"x 8"x 10'-5 1/2" | ST 400
P2 | 1 | 4"x 7"x 38"x 8'-8" | ST 400
P4 | 3 | 8"x 9"x 1'-0"x 8'-8" | ST 400
P5 | 1 | 4"x 9"x 1'-3"x 8'-8" | ST 401
P9 | 8 | 3"x 3"x 8"x 8'-2" | ST 402
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL. LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, U.N.O.
ALL CONNECTION DETAILS FOR FLOORS 1...50 & 92 ARE SHOWN ON SHEETS CD 2.0 THRU CD 2.23
UNLESS OTHERWISE SHOWN, ALL CONNECTION ARC WELDS SHALL BE 1/4"x4" FULL THRU AT FILLET.
REF DRWG
233-3 10-4-68
7-684.28 7-22-68
7-681-13 0-4-68
7-681-A 5 & 6 10-4-68
7-681-J 0-4-68
7-682-17 0-4-68
56-126 0-1-68
DIVISION BY
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. 1 FLOORS 25(NORTH & SOUTH) 59(NORTH)
PANEL DP2A - 20' x 59'-9"
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN JOB NO 7-681-J
PLATE
APPROVED FOR FABRICATION BY ____ FOR WORTH A
DATE
DRAWN BY EWK
DATE DEC 5 1968
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR
DATE
CHECKED BY W. CHUNG IN CHARGE OF
DATE DEC 5 1968
FABRICATION CONT NO W.T.C. 221
SHEET NO FP 22A 1
DRAFTED BY A.L. MEIER

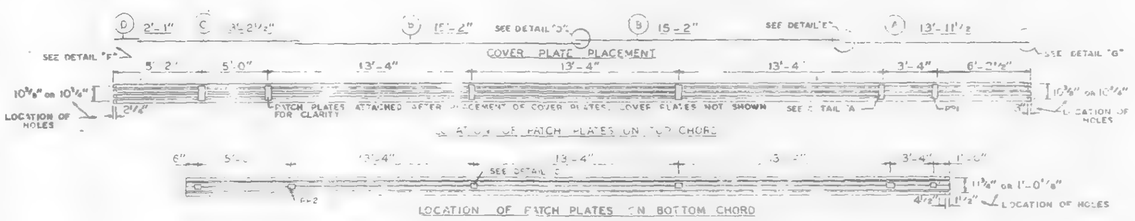


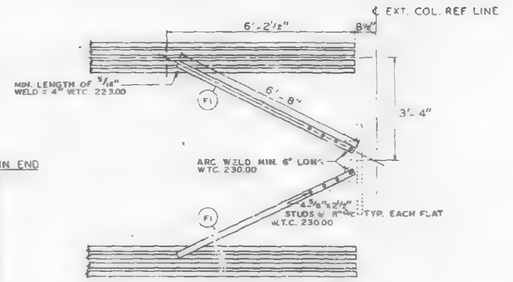
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

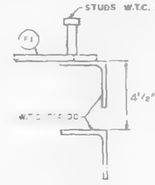
PANEL NO. D5B SIZE 20' x 59'-8 1/2"







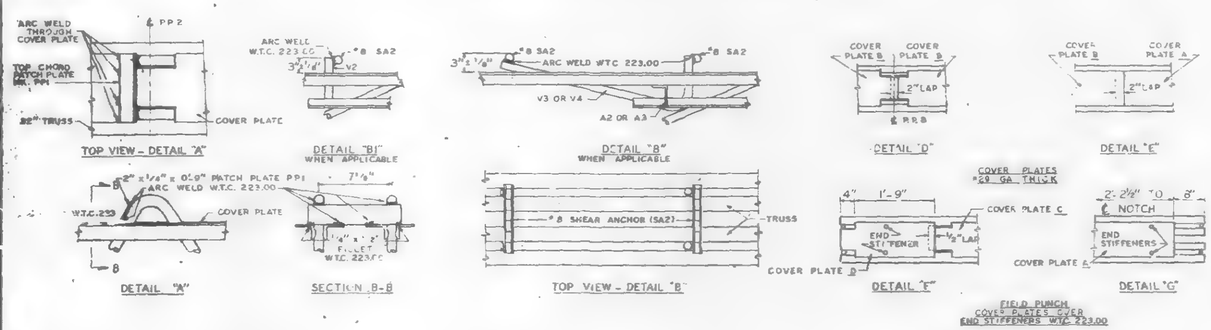
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

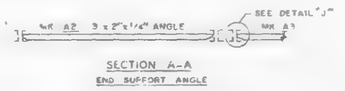


CLIP ANGLE LOCATION FOR DIAGONAL FLAT 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T1B	1	C32T1B - 59'-8 1/2"	ST 2018
	T2B	1	C32T2B - 59'-8 1/2"	ST 2028
	T7B	2	C32T7B - 59'-8 1/2"	ST 2078
	T8B	2	C32T8B - 59'-8 1/2"	ST 2088
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	BT 210
	T10A	1	24T10A - 19'-11"	BT 210A
	T10B	1	24T10B - 19'-11"	BT 210B
	T16	1	24T16 - 19'-11"	BT 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1'-9 1/2"	ST 403
	A2	4	3" x 2" x 5'-11 5/8"	ST 403
	A3	2	3" x 2" x 5'-11 5/8"	ST 403
DIAGONAL FLATS	F1	8	1 1/2" x 8 7/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	16	3" x 2 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	8" x .0135" x 13'-11 1/2"	ST 303
	B	8	8" x .0135" x 15'-2"	ST 303
	C	3	8" x .0135" x 13'-2 1/2"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/8" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3'-6 1/2"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB2	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-8"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .38" x 0'-9"	ST 401

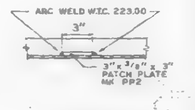
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" = 1" FULL THROAT FILLET.



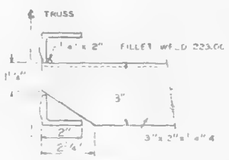


SECTION A-A
END SUPPORT ANGLE

DETAIL "C"



SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

REF. DRWGS.		
	7-A82-5 & 11	7-22-68
	7-A83-71	11-25-68
	7-A84-3	10-15-68
	7-A84-15 & 16	7-22-68
	7-A84-42	10-15-68
	SK-124	10-11-68
	7-381-5	10-15-68
	7-381-2, 3 & 4	7-22-68

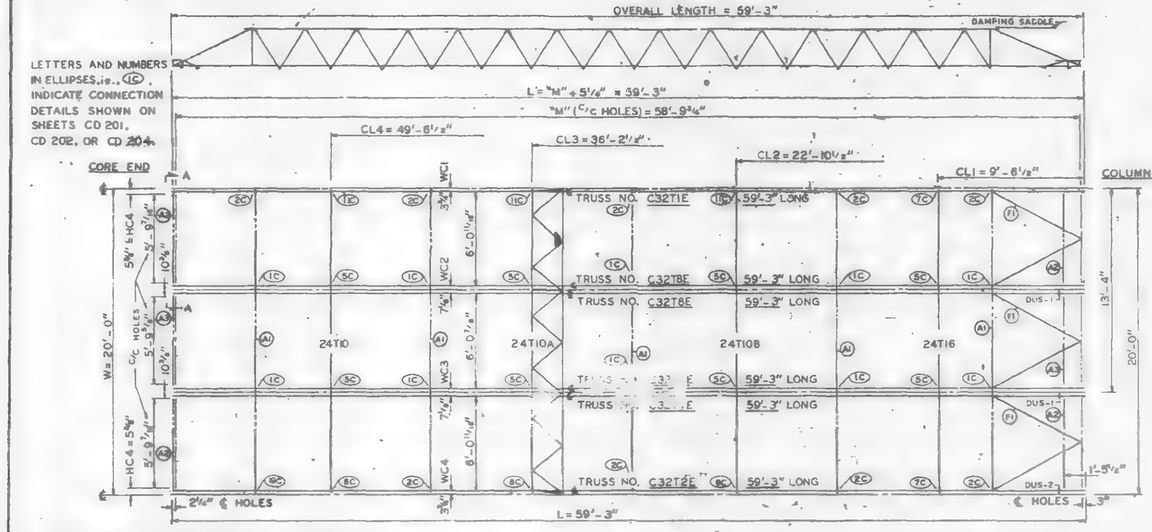
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 33 (NORTH)

PANEL D5B - 20' x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY

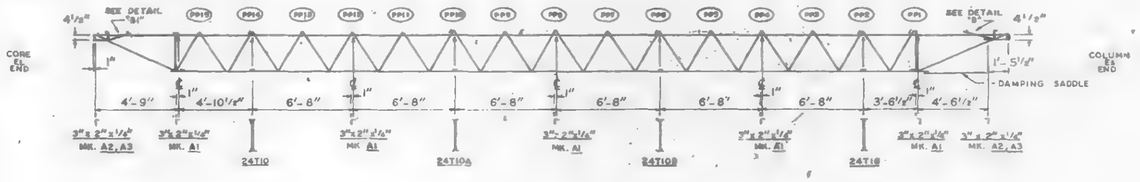
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-71	PLATE
APPROVED FOR FABRICATION BY ____ FOR P.O.N.Y.A.	DATE 2/6/69	DRAWN BY gdc DATE JAN 14, 1969	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M.CMURA DATE JAN 14, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP D5B

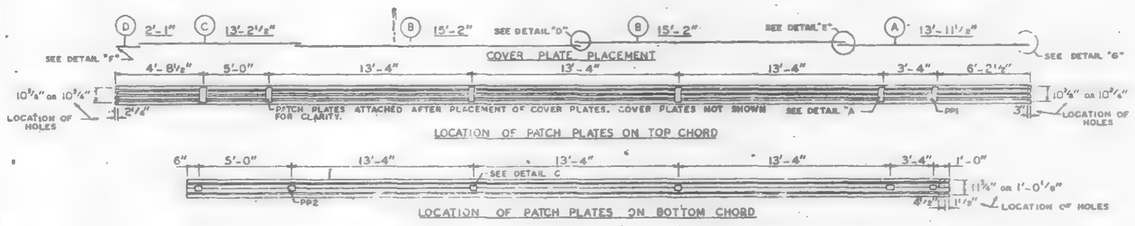


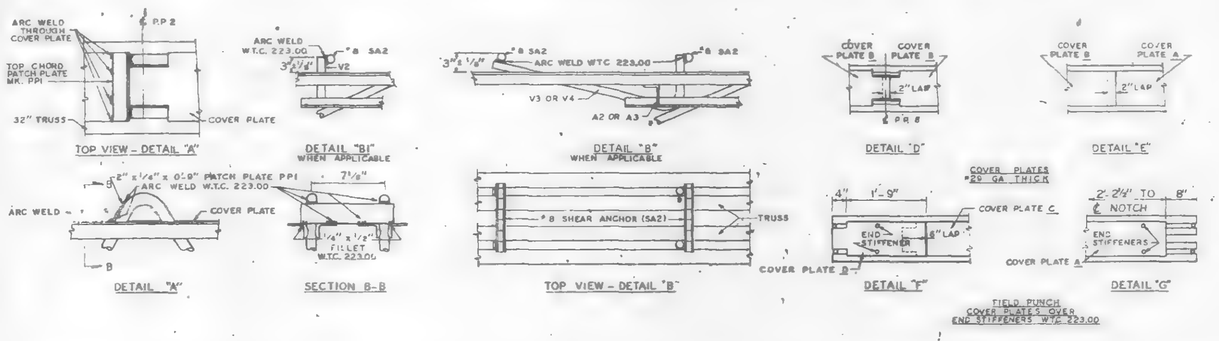
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

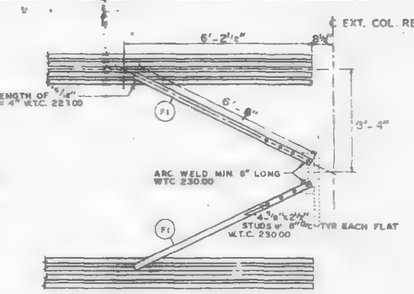
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE '℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DIE SIZE 20' x 59'-3"

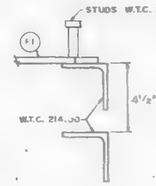








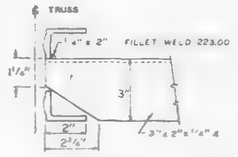
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00.

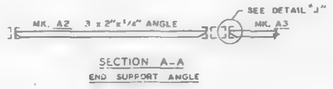


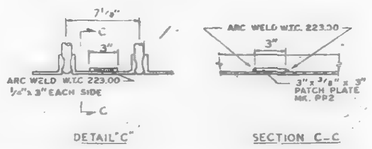
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/16" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T1E	1	C32T1E - 58'-3"	ST 201E
	T2E	1	C32T2E - 58'-3"	ST 202E
	T7E	2	C32T7E - 58'-3"	ST 207E
	T8E	2	C32T8E - 58'-3"	ST 208E
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-1"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 1'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11"	ST 303
	B	8	9" x .0135" x 19'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
"B SHEAR ANCHOR	SA2	9	"B REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3/8" x 3 1/2" x 3/4" x 3'-8"	ST 298
	DUS-2	1	3/8" x 3 1/2" x 3/4" x 3'-8"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/8" x 3 1/8" x 8 1/2"	ST 400
	P2	1	4 1/8" x .39" x 0'-8"	ST 400
	P3	1	4 1/8" x .39" x 1'-0"	ST 400
	P4	3	6 1/8" x 1/8" x 0'-8"	ST-400
	P5	1	4 1/8" x .39" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/16" x 1" FULL THROAT FILLET.







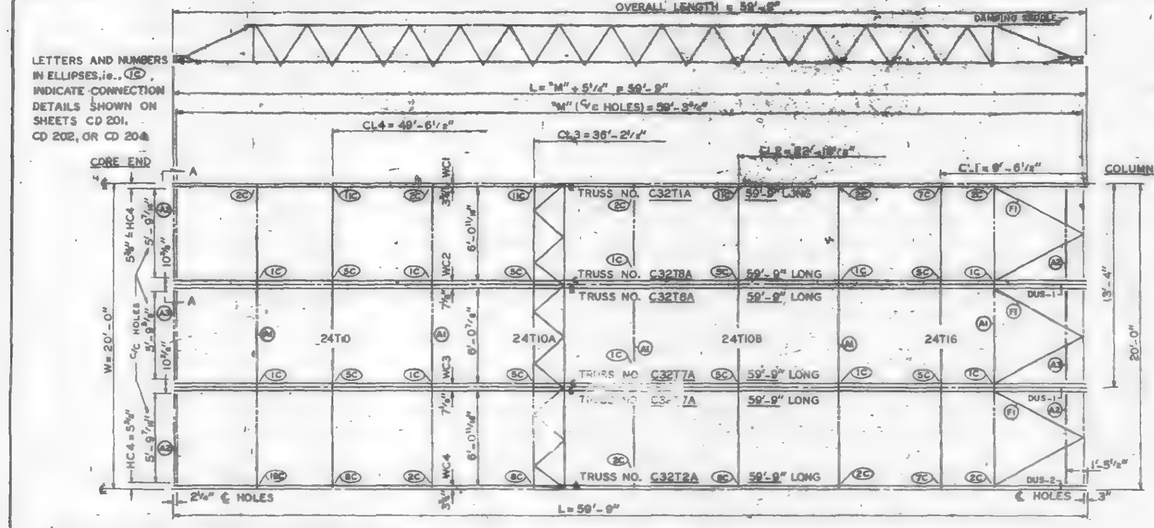
REF. DRWGS.		
	7-AB2-5 & 11	4-15-68
	7-AB3-9	4-15-68
	7-AB4-3, 31 & 39	1-3-68
	7-AB4-15 & 16	5-8-68
	7-AB4-42	4-1-68
	SA-124	10-20-66
	7-AB1-2	2-15-68
	7-AB1-3, 4 & 5	4-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)

PANEL DIE - 20' x 59'-3"

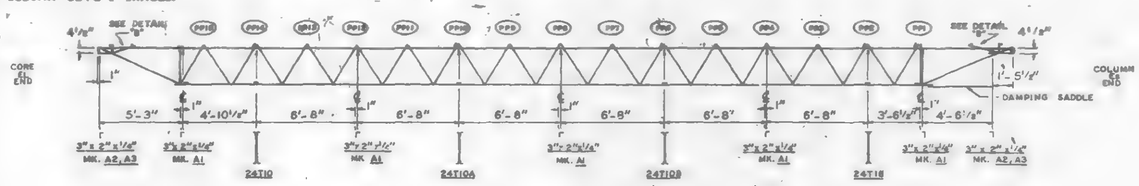
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-6 4-15-68	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 8/19/68	DRAWN BY: gdc DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE ____	CHECKED BY T.M.CHURA DATE JULY 22, 1968	IN CHARGE OF PROD DEV ____
DETAILED BY A CARL WEBER		FABRICATION CONT NO W.T.C 221	SHEET NO FP DIE

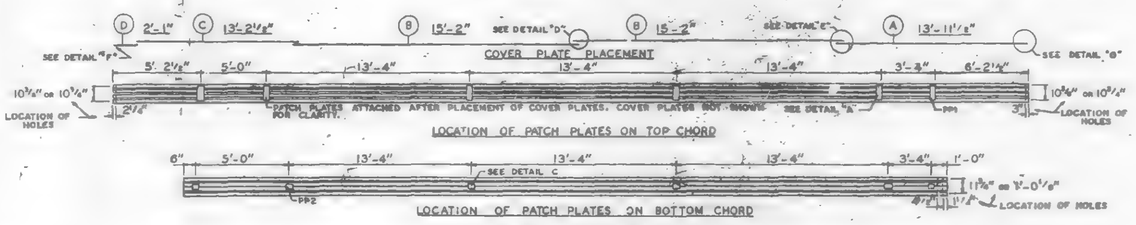


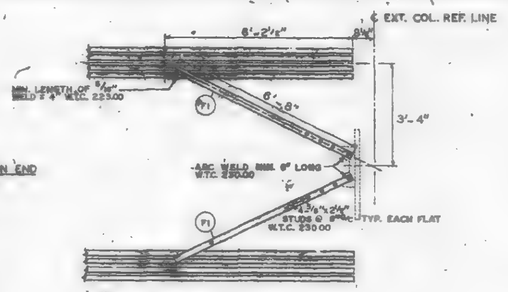
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

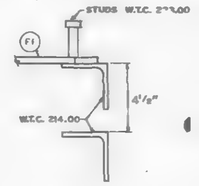
PANEL NO. DIA SIZE 20' x 59'-9"







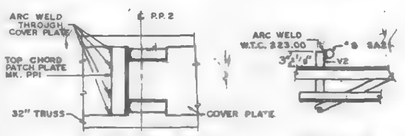
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

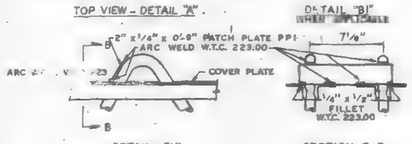
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T1A	1	C32T1A - 59'-9"	ST 201A
	T2A	1	C32T2A - 59'-9"	ST 202A
	T7A	2	C32T7A - 59'-9"	ST 207A
	T8A	2	C32T8A - 59'-9"	ST 208A
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-1 7/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-1 7/16"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 8 1/2" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-6"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 5/16"	ST 303
	B	6	6" x .0135" x 13'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/16"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1/4" x 1 1/4" x 0'-8"	ST 400
7/8 SHEAR ANCHOR	SA2	12	7/8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-8 1/2"	ST 208
	DUS-2	1	3 1/2" x 3 1/2" x 3/16" x 3'-6 1/2"	ST 253
CONNECTION BAR	CB1	4	1" ϕ x 1 - 3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/2" x 6 1/2"	ST 400
	P2	1	4 1/2" x .398" x 0'-8"	ST 400
	P3	1	4 1/2" x .398" x 1'-0"	ST 400
	P4	3	6 1/2" x 1 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .398" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUA..
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

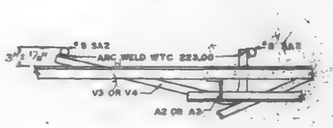


TOP VIEW - DETAIL "A"

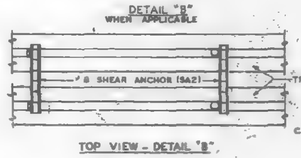
DETAIL "B1" WHEN APPLICABLE



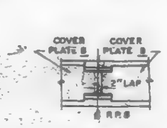
DETAIL "A" SECTION B-B



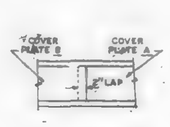
DETAIL "B" WHEN APPLICABLE



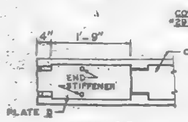
TOP VIEW - DETAIL "B"



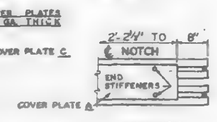
DETAIL "D"



DETAIL "E"

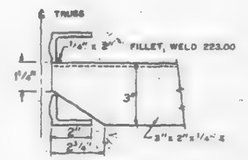


DETAIL "F"

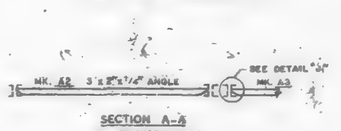


DETAIL "G"

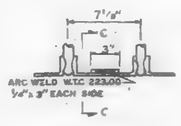
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



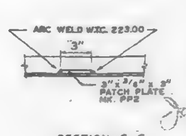
DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

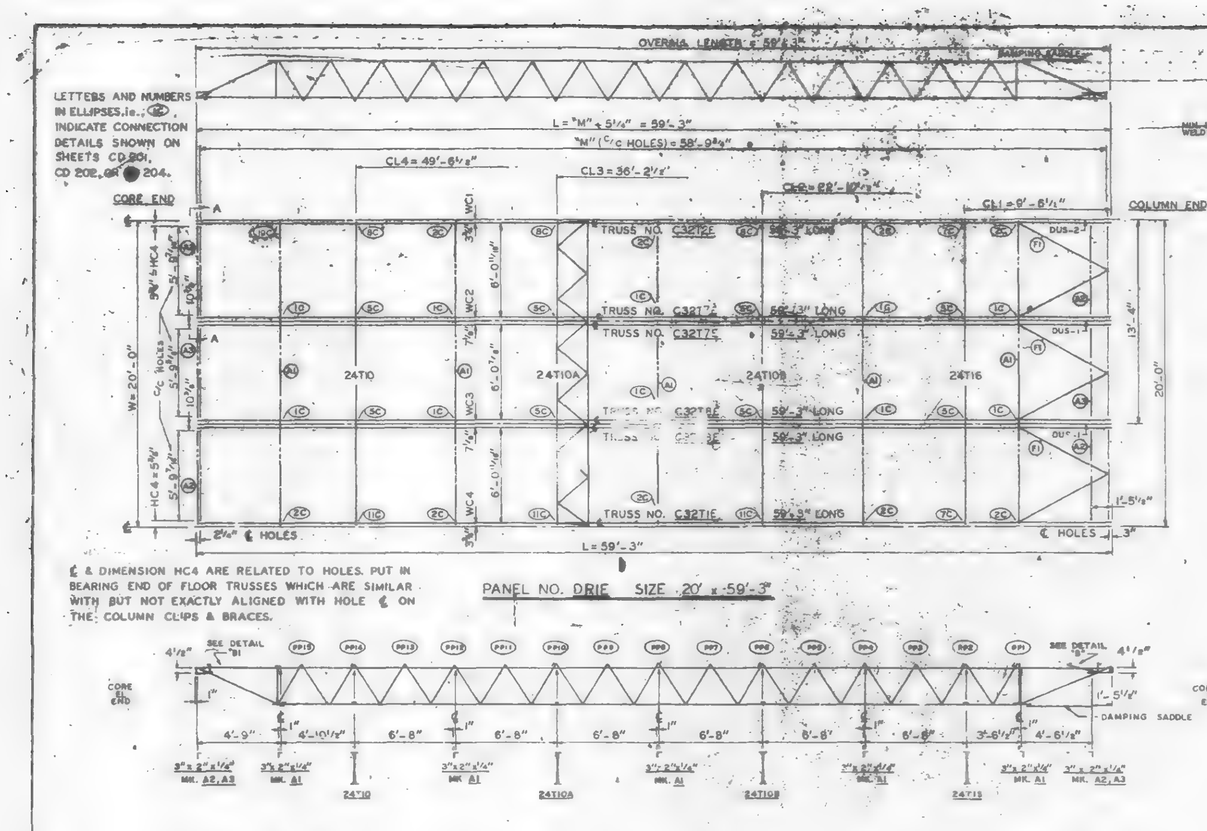
REF. DRWGS.		
7-A82-5 & 11	4-15-68
7-A83-9	4-15-68
7-A84-3, 31 & 39	1-3-68
7-A84-15 & 16	5-6-68
7-A84-42	4-1-68
SK-124	10-20-68
7-381-2	2-15-68
7-381-3, 4 & 5	4-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66, 68.
69 (NORTH) PANEL DIA - 20' x 59'-9"

FABRICATION BY: LACLEDE STEEL COMPANY

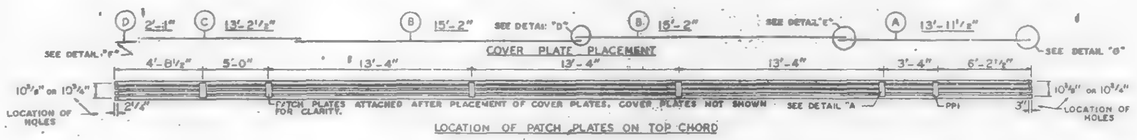
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-9 4-15-68	PLATE
APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.A.	DATE 6/14/68	DRAWN BY: GAC DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHUPA DATE JULY 22, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 321	SHEET NO. FP DIA



LETTERS AND NUMBERS IN ELLIPSES, i.e., (2C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR 204.

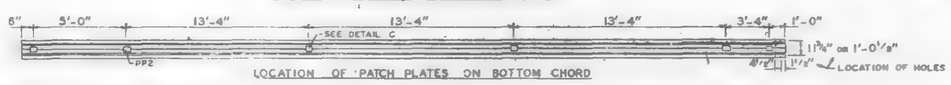
℄ & DIMENSION HC4 ARE RELATED TO HOLES. PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DRIE SIZE 20' x 59'-3"

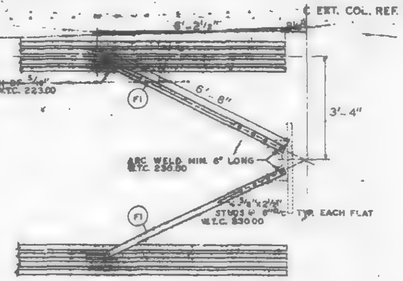


COVER PLATE PLACEMENT

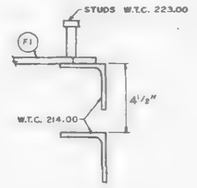
LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD



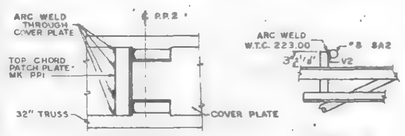
TYPICAL PLAN OF TOP CHORD COLUMN END, DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00 .



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

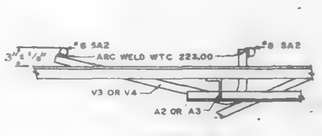
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T1E	1	C32T1E - 59'-3"	ST 201E
	T2E	1	C32T2E - 59'-3"	ST 202E
	T7E	2	C32T7E - 59'-3"	ST 207E
	T8E	2	C32T8E - 59'-3"	ST 208E
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 3 7/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1 1/2" x 0'-9"	ST 400
	PP2	18	8" x 3 7/8" x 0'-3"	ST 400
COVER PLATES	A	3	8" x .0135" x 13'-11 3/4"	ST 303
	B	9	8" x .0135" x 19'-2"	ST 303
	C	3	8" x .0135" x 13'-2 1/2"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 3 1/2" x 1 1/2" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3 1/2" x 2 3/4" x 3'-8 3/4"	ST 298
	DUS-2	1	3/16" x 3 1/2" x 2 3/4" x 3'-8 3/4"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/8" x 3 3/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-8"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .38" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

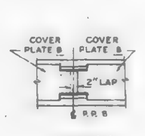


TOP VIEW - DETAIL "A"

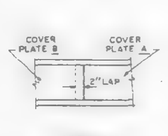
DETAIL "B1" WHEN APPLICABLE



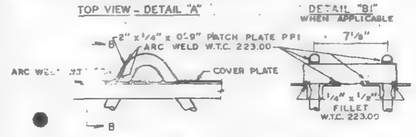
DETAIL "B" WHEN APPLICABLE



DETAIL "D"

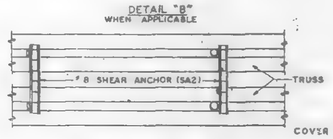


DETAIL "E"

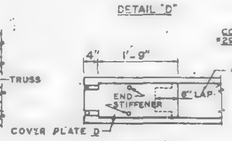


DETAIL "A"

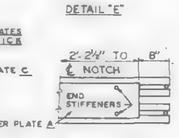
SECTION B-B



TOP VIEW - DETAIL "B"

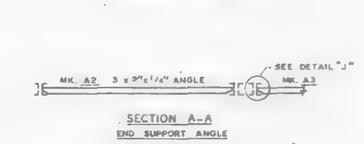


DETAIL "F"

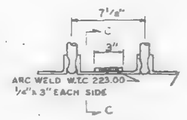


DETAIL "G"

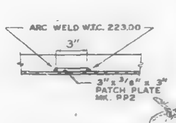
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



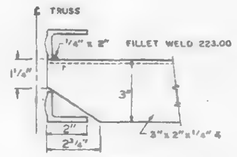
SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

REF. DRWGS.		
7-AB2-5 & 11	4-19-68
7-AB3-9	4-15-68
7-AB4-3, 3.1 & 3B	1-3-68
7-AB4-15 & 16	5-8-68
7-AB4-42	4-1-68
SA-124	10-20-65
7-AB1-2	2-15-68
7-AB1-3, 4 & 5	4-15-68

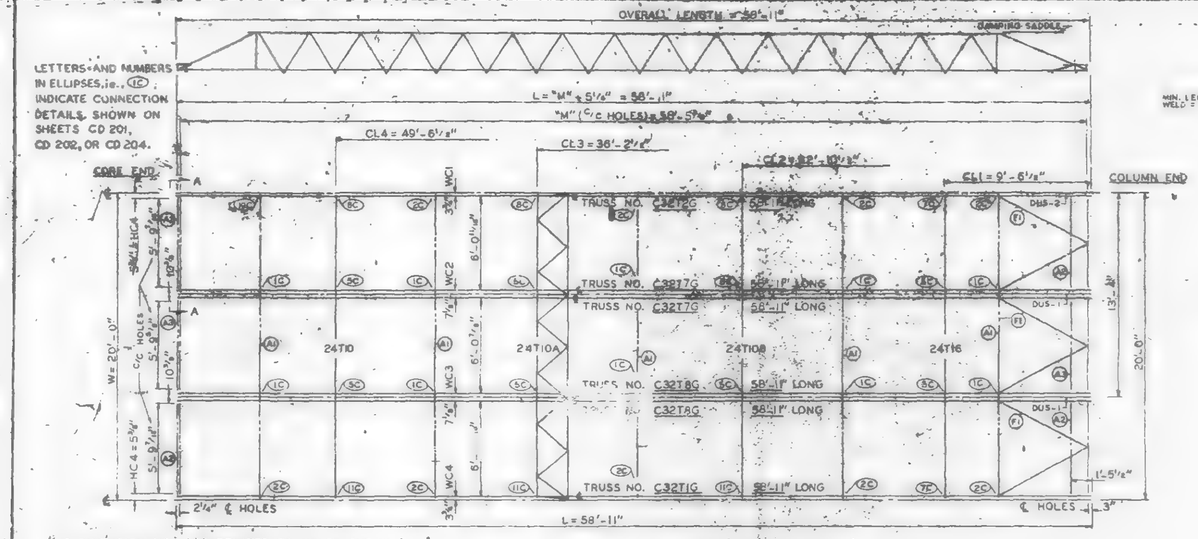
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (SOUTH)

PANEL DRIE- 20' x 59'-3"

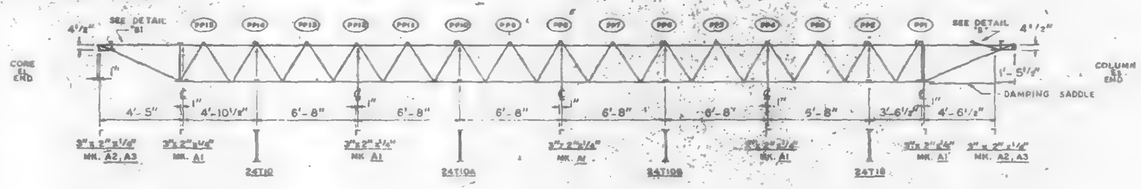
FABRICATION BY LACLEDE STEEL COMPANY

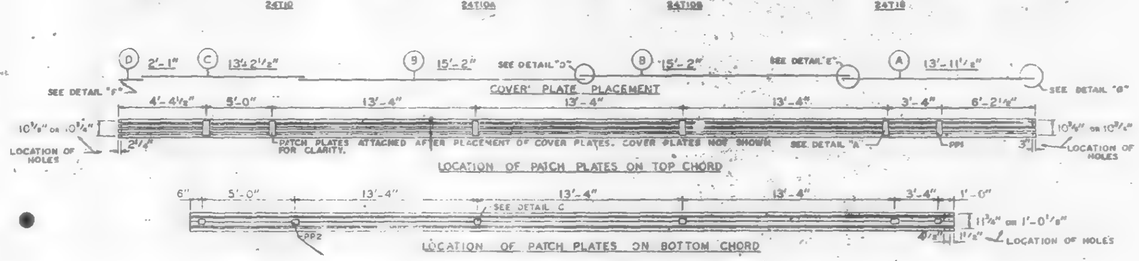
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-	PLATE
APPROVED FOR FABRICATION FOR PONYA BY	DATE 2/19/68	DRAWN BY GDC DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JULY 22, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER		LACLEDE STEEL CO. FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP DRIE

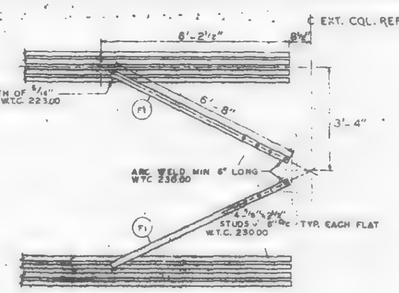


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

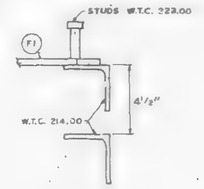
PANEL NO. DRIG SIZE 20' x 58'-11"







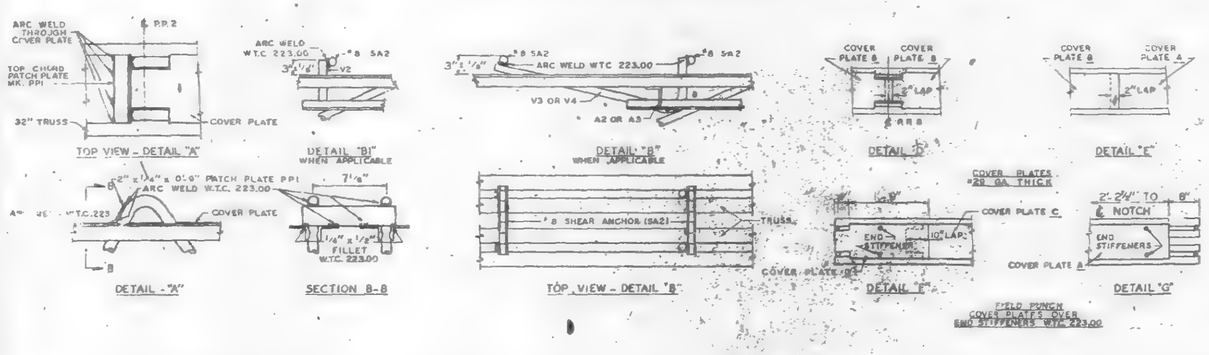
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

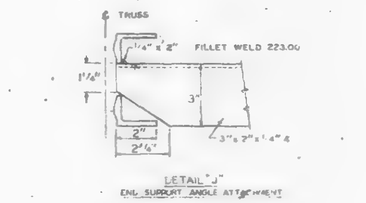


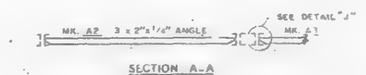
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T1G	1	C32T1G - 58'-11"	ST 201G
	T2G	1	C32T2G - 58'-11"	ST 202G
	T7G	2	C32T7G - 58'-11"	ST 207G
	T8G	2	C32T8G - 58'-11"	ST 208G
BRIDGING TRUSSES	T1O	1	24T1O - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-1 7/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-1 7/8"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 5/16" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 5/8"	ST 303
	B	5	9" x .0135" x 19'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 3 1/2" x 1 1/2" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-6 1/2"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/16" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/16" x 3 1/4" x 8 1/2"	ST 400
	P2	1	4 3/8" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	8 1/2" x 1 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .38" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" = 1" FULL THROAT FILLET.







SECTION A-A
END SUPPORT ANGLE

REF DRWGS.		
7-A82-5 & 11	4-15-68
7-A83-10	4-15-68
7-A84-3, 3.1 & 39	1-3-68
7-A84-15 & 16	5-8-68
7-A84-42	4-1-68
SA-124	10-20-66
7-A81-2	2-15-68
7-A81-3, 4 & 5	4-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11, 39 (NORTH)

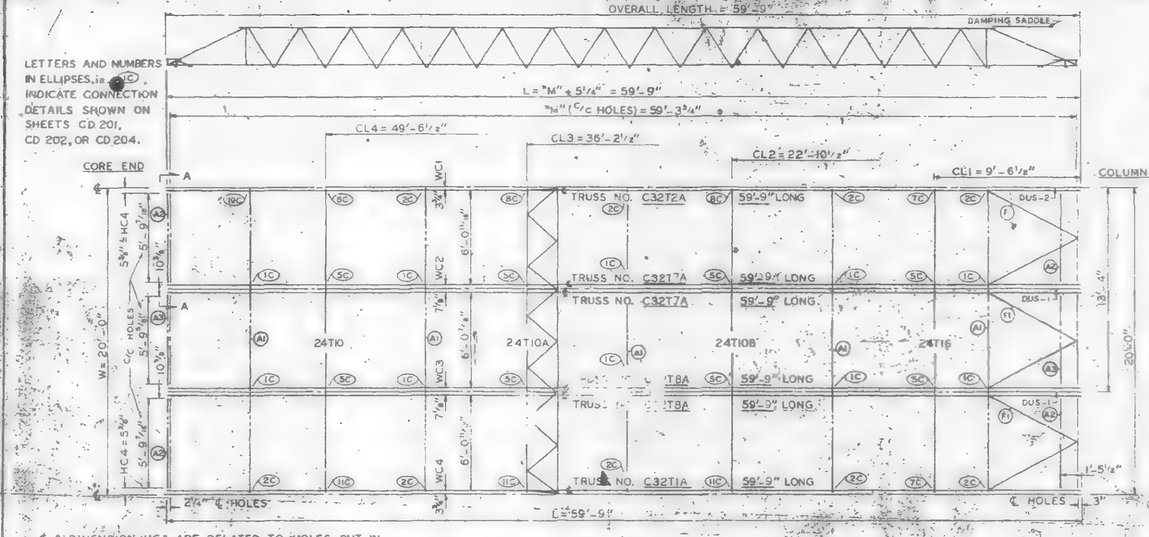
PANEL DRIG- 20' x 58'-11"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-10 4-15-68	PLATE
APPROVED FOR FABRICATION FOR PONY A	DATE 9/9/68	DRAWN BY gdc DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JULY 22, 1968	IN CHARGE OF PROD. DEV
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP DRIG

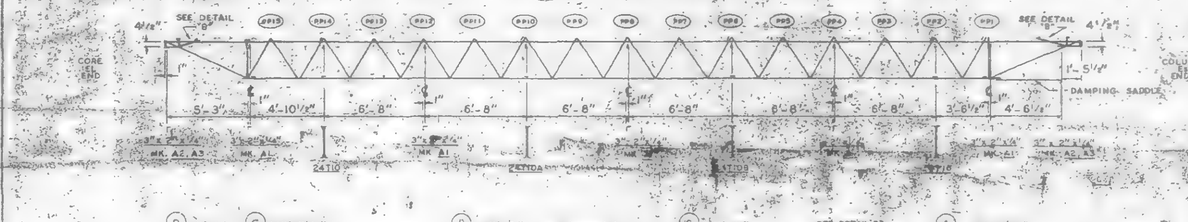
LACLEDE STEEL CO.

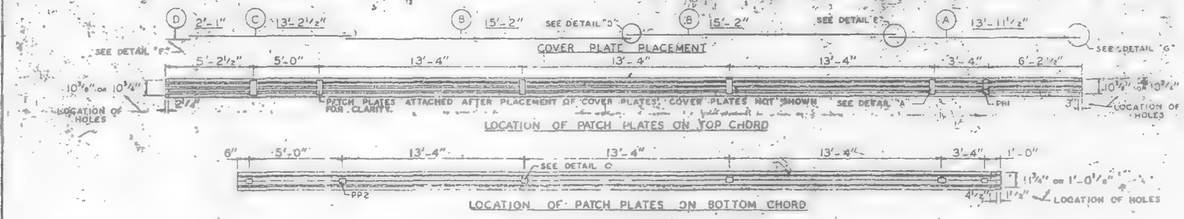
LETTERS AND NUMBERS IN ELLIPSES, ie (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

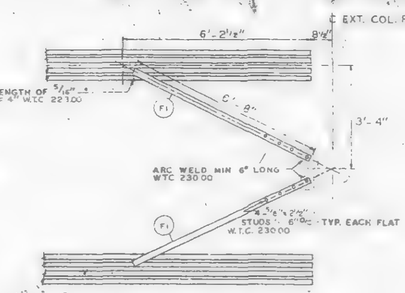


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

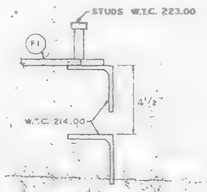
PANEL NO. DR1A SIZE 20' x 59'-9"







TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



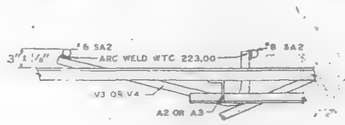
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG.
FLOOR TRUSSES	T1A	1	C32T1A - 59'-9"	ST 201A
	T2A	1	C32T2A - 59'-8"	ST 202A
	T3A	2	C32T7A - 59'-9"	ST 207A
	T8A	2	C32T8A - 59'-9"	ST 208A
BRIDGING TRUSSES	T1D	1	24T1D - 19'-11"	BT 210
	T1DA	1	24T1DA - 19'-11"	BT 210A
	T1DB	1	24T1DB - 19'-11"	BT 210B
	T1B	1	24T1B - 19'-11"	BT 218
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	8	1 1/2" x 5/16" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 3/16" x 0'-3"	ST 400
COVER PLATES	A	3	0" x .0135" x 13'-11 3/4"	ST 303
	B	8	0" x .0135" x 18'-2"	ST 303
	C	3	0" x .0135" x 13'-2 1/4"	ST 303
	D	3	0" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	112	# 8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3 1/2" x 3'-6"	ST 298
	DUS-2	1	3/16" x 3 1/2" x 3'-6"	ST 298
CONNECTION BAR	CB1	4	1" x 1'-3"	ST 400
	CB4	8	1" x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/2" x 8 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-8"	ST 400
	P3	1	6" x .39" x 1'-0"	ST 400
	P4	3	6 1/2" x 1 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401

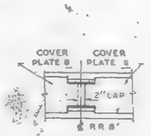
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

TOP VIEW - DETAIL "A"

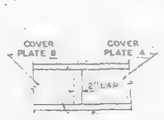
DETAIL "B1" WHEN APPLICABLE



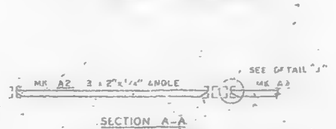
DETAIL "B" WHEN APPLICABLE



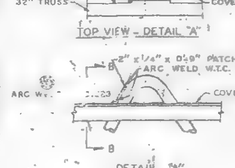
DETAIL "D"



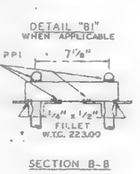
DETAIL "E"



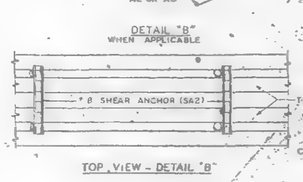
SECTION A-A
END SUPPORT ANGLE



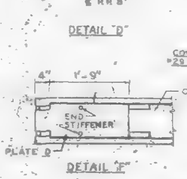
DETAIL "A"



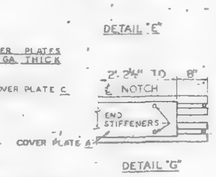
SECTION B-B



TOP VIEW - DETAIL "B"

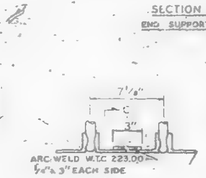


DETAIL "F"

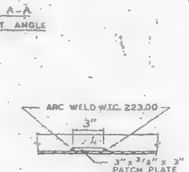


DETAIL "G"

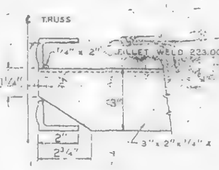
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "C"



SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

REF. DRWGS.		
	7-AB2-5 & 11	4-15-68
	7-AB3-10	4-15-68
	7-AB4-3, 31 & 39	1-3-68
	7-AB4-15 & 16	5-6-68
	7-AB4-42	4-1-68
	SA-124	10-20-68
	7-AB1-2	2-15-68
	7-AB1-3, 4 & 5	4-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49-58, 60-66 & 68-69 (NORTH) PANEL DR1A - 20' x 59'-9"

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 AB3-10 4-15-68	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 6/19/68	DRAWN BY: gdc DATE JULY 22, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.N. CHURA DATE JULY 22, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO. WTC 221	SHEET NO. FP DR1A

LETTERS & NUMBERS IN ELLIPSES (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 601, OR CD

OVERALL LENGTH = 58'-1 1/4"

DAMPING SADDLE

L = "M" + 5 1/4" = 57'-3"

"M" (C/C HOLES) = 57'-3/4"

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/2"

CORE END

WC1

WC3

WC4

24T10J

24T10K

24T10L

24T16

TRUSS NO. C32T27N

TRUSS NO. C32T30N

57'-9" LONG

4CA

5 3/4 & HC4

WK 20'-0"

C/C HOLES

HC4 = 15 3/8"

2 1/4" ℄ HOLES

L = 57'-9"

℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DR3N. SIZE 20' x 57'-9"

SEE DETAIL "B"

SEE DETAIL "C"

4 1/2"

CORE END

COLUMN ℄ END

DAMPING SADDLE

PP13 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP7 PP6 PP5 PP4 PP3 PP2 PP1

3'-3" 4'-10 1/8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6 1/2" 4'-8 1/2"

3" x 2" x 1/4" MK. A2, A3

3" x 2" x 1/4" MK. A1

3" x 2" x 1/4" MK. A4

3" x 2" x 1/4" MK. A5

3" x 2" x 1/4" MK. A6

3" x 2" x 1/4" MK. A2, A3

24T10J

24T10K

24T10J

24T16

B 15'-2" SEE DETAIL "D" B 15'-2" SEE DETAIL "E" A 13'-11 1/2"

SEE DETAIL "F"

SEE DETAIL "G"

4'-10 1/2" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"

10 3/4" or 10 7/8"

12 1/2"

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF HOLES

PPF

3"

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

8" 5'-0" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

SEE DETAIL C

PPR2

11 3/4" or 1'-0 1/8"

1 1/2"

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD

ARC WELD THROUGH COVER PLATE

TOP CHORD PATCH PLATE MK. PP1

32" TRUSS

COVER PLATE

"TOP VIEW - DETAIL "A"

ARC WELD W.T.C. 223.00

3" x 1/4"

8 SA2

V2

DETAIL "B1" WHEN APPLICABLE

3" x 1/4"

8 SA2

ARC WELD WTC 223.00

V3 OR V4

A2 OR A3

DETAIL "B" WHEN APPLICABLE

COVER PLATE B

COVER PLATE B

℄ PP2

DETAIL "D"

COVER PLATE B

COVER PLATE A

DETAIL "E"

2" x 1/4" x 0'-9" PATCH PLATE PP1

ARC WELD W.T.C. 223.00

ARC WELD W.T.C. 223

COVER PLATE

B

DETAIL "A"

7 1/8"

1/4" x 1 1/2" FILLET W.T.C. 223.00

SECTION B-B

8 SHEAR ANCHOR (SA2)

TRUSS

TOP VIEW - DETAIL "B"

COVER PLATES =20 GA. THICK

1"

COVER PLATE C

END STIFFENER

DETAIL "F"

2'-8" TO 8"

NOTCH

END STIFFENERS

COVER PLATE A

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

FOR BEARING FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

27N	27N - 5'-9"	227N	
28N	28N - 5'-9"	228N	
29N	29N - 57'-9"	229N	
30N	30N - 5'-9"	230N	
		J	
		K	
		L	

	24	4" x 4" x 11'-6"		ST 400
	SA2	8	8" RLAD x 1'-9"	S1 400
	S4	2	3" x 3" x 4'-3 5/8"	ST 298
	S2	1	3" x 3" x 4'-8 1/4"	ST 298
	L2	16	1" ø x 9" ⚠	ST 400
	PP	4	3" x 8" x 6 1/2"	ST 400
	PP1	2	2" x 3" x 1'-0"	ST 400
	PP2	2	4" x 3" x 1'-0"	ST 400
	PP4	3	6" x 1" x 1'-8"	ST 400
	PP6	1	4" x 3" x 0'-9"	ST 401

NOTES: 1. ALL BOLTS ARE 3/4" ø A325 WITH LOW HYDROGEN BOLTS LIKE THE E-70 SERIES OR EQUAL.
2. UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

NO	DATE	REVISION	BY
1	4-22-69	AS NOTED	G.D.C.

REF. DRAWS.

7-AB2-5 & 11	7-22-68
7-AB3-48	1-6-69
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
26-124	10-11-68
7-AB1-5	10-15-68
7-AB1, 2, 3 & 4	7-22-68

TRUSS

4" x 2" FILLET WELD 223.00

3"

3" x 2" x 1/4" ∠

DETAIL "J"

L SUPPORT ANGLE ATTACHMENT

SEE DETAIL "J"

SECTION A-A

SHOWING SUPPORT ANGLE

ARC WELD W.T.C. 223.00

1/4" x 3" EACH SIDE

DETAIL "C"

ARC WELD W.T.C. 223.00

3" x 2" x 3" PATCH PLATE MK. PP2

SECTION C-C

DETAILS

AUTHORITY

44 (NORTH)

PANEL DR3N 20' x 57'-9"

BLDG. B FLOORS - 44 (EAST & WEST)

COMPANY

FABRICATOR

AT

DRAWING NO. AB3-48 1-6-69

PLATE

DRAWN BY G.D.C.

DATE MARCH 26, 1969

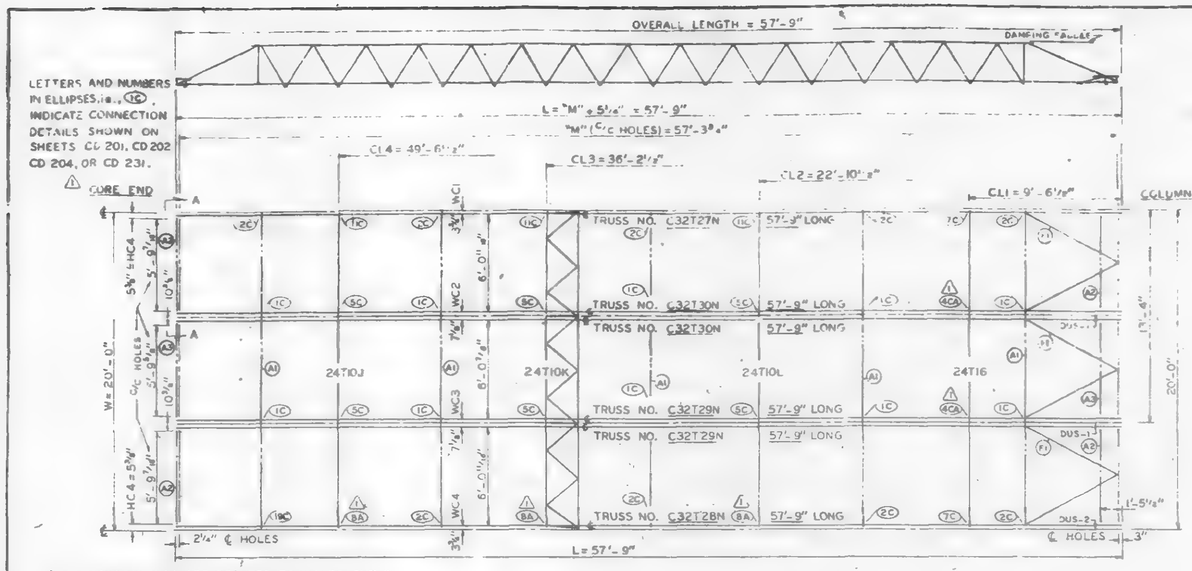
CHECKED BY T.M. CHUMA

DATE MARCH 26, 1969

IN CHARGE OF PROD. DEV.

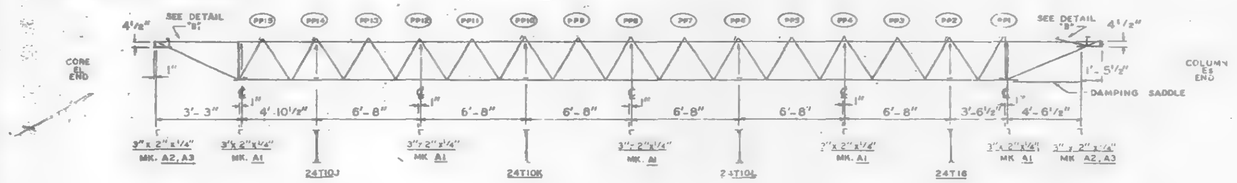
FABRICATION CONT NO. 221

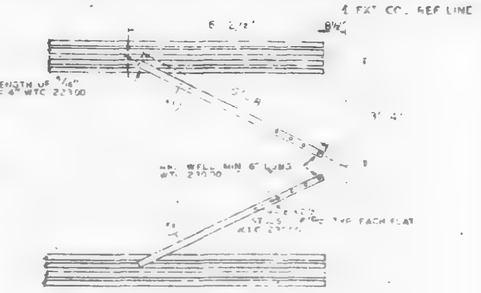
SHEET NO. FP DR3N

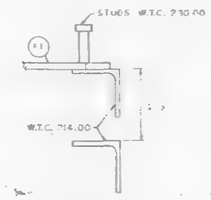


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D3N SIZE 20' x 57'-9"



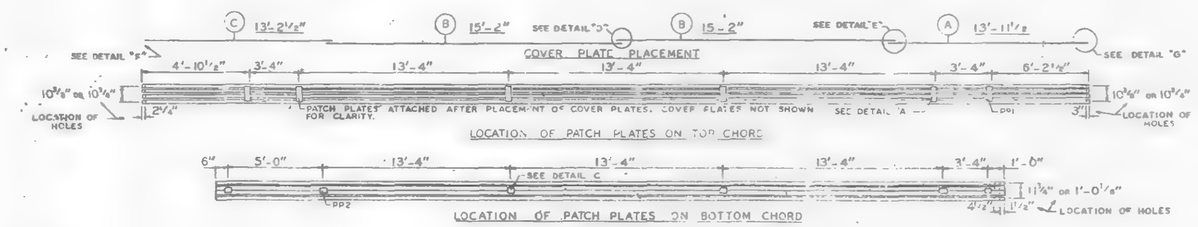




CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MATERIAL	MK	QTY	SIZE	DWG
FLOOR TRUSSES	C32T27N	4	C32T27N - 57'-9"	ST 227N
	C32T28N	2	C32T28N - 57'-9"	ST 228N
	C32T29N	2	C32T29N - 57'-9"	ST 229N
	C32T30N	2	C32T30N - 57'-9"	ST 230N
	C24T10J	4	C24T10J - 19'-11"	ST 210J
	C24T10K	4	C24T10K - 19'-11"	ST 210K
	C24T10L	4	C24T10L - 19'-11"	ST 210L
	C24T16	4	C24T16 - 19'-11"	ST 216
	A1	4	L 3" x 3" x 1/4" x 15'-2"	ST 403
	A2	4	L 3" x 3" x 1/4" x 5'-11 7/8"	ST 403
	A3	2	L 3" x 3" x 1/4" x 5'-11 7/8"	ST 403
TIE PLATES	P1	4	PL 2" x 8" x 0'-8"	ST 402
PATCH PLATES	PP1	4	PL 2" x 8" x 0'-8"	ST 400
	PP2	16	PL 3" x 8" x 0'-9"	ST 400
OVER PLATES	A	2	PL 6" x 0'-7 3/4" x 13'-10 1/2"	ST 303
	B	2	PL 6" x 0'-7 3/4" x 13'-2"	ST 303
	C	1	PL 6" x 0'-7 3/4" x 13'-2 1/2"	ST 303
ANGLE CLIPS	C1	24	L 2 1/2" x 2 1/2" x 4" x 0'-8"	ST 400
#9 SHEAR ANCHOR	SA2	9	#9 SHEAR x 0'-8"	ST 400
DAMPING SADDLE	DAS-1	2	PL 3/16" x 9 1/4" x 3'-6 1/8"	ST 208
	DAS-2	1	PL 3/16" x 9 1/4" x 3'-6 1/8"	ST 208
CONNECTION BAR	CB1	10	1" ϕ x 1'-3" (1)	ST 400
CONNECTION PLATES	-1	4	PL 3/16" x 3 5/8" x 8 1/2"	ST 400
	-2	4	PL 3/16" x 7 3/8" x 0'-8"	ST 400
	-3	4	PL 3/16" x 3 3/8" x 1'-0"	ST 400
	P4	3	PL 3/16" x 1'-2" x 0'-8"	ST 400
	P5	1	PL 3/16" x 7 3/8" x 0'-9"	ST 401

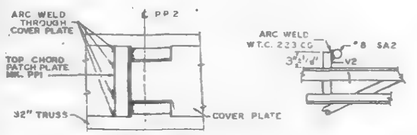
NOTES: (1) ALL SHOP WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



COVER PLATE PLACEMENT

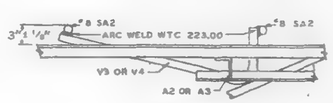
LOCATION OF PATCH PLATES ON TOP CHORD

LOCATION OF PATCH PLATES ON BOTTOM CHORD

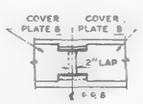


TOP VIEW - DETAIL "A"

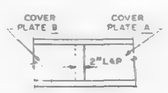
DETAIL "B1" WHEN APPLICABLE



DETAIL "B" WHEN APPLICABLE

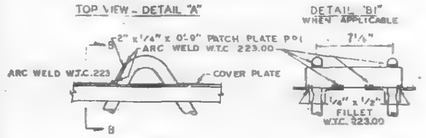


DETAIL "D"

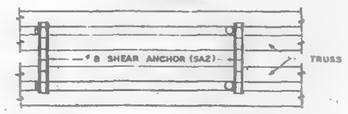


DETAIL "E"

SECTION A-A
END SUPPORT ANGLE



DETAIL "A" SECTION B-B

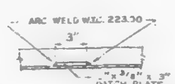


TOP VIEW - DETAIL "B"

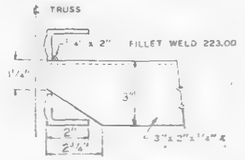
DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00

DETAIL "C"



SECTION C-C



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	BY
1	4-22-69	AS NOTED	GDC

P.F. DRWGS.

7-A82-5 & 11	7-24-68
7-A83-47	1-8-69
7-A84-3	10-15-68
7-A84-15 & 16	7-24-68
7-A84-42	10-15-68
62-124	10-11-68
7-A81-5	10-15-68
7-A81-2 & 3	7-24-68

LOCATION DETAILS

WORLD TRADE CENTER - N.Y.C.

THE PORT OF NEW YORK AUTHORITY

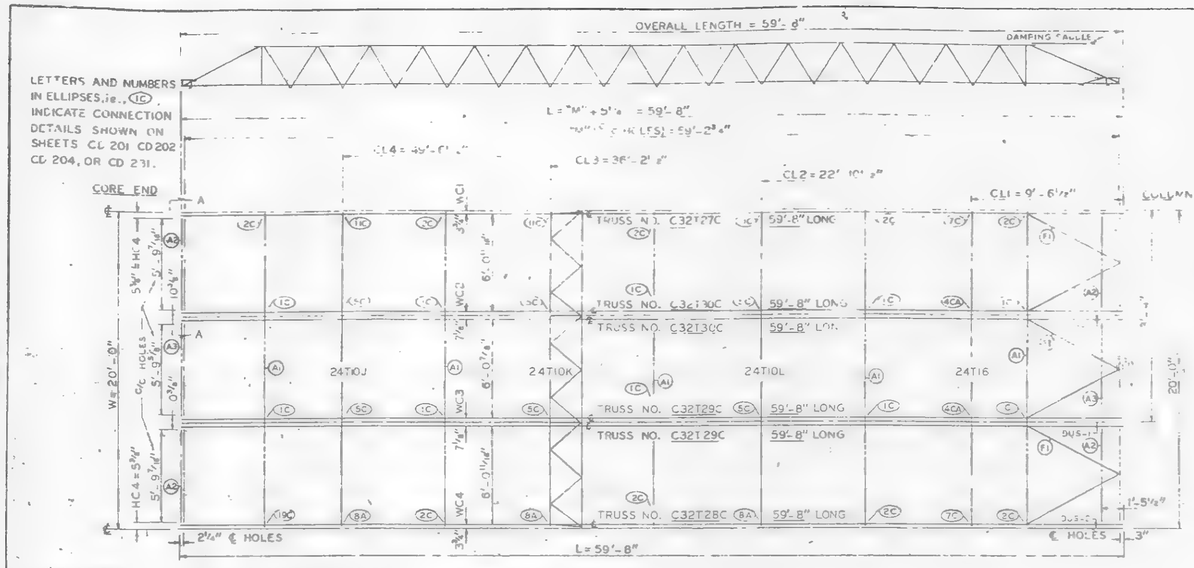
BLDG. A FLOORS 44 (NORTH)

PANEL D3N - 20' - 57'-9"

BLDG. B FLOORS 44 (EAST & WEST)

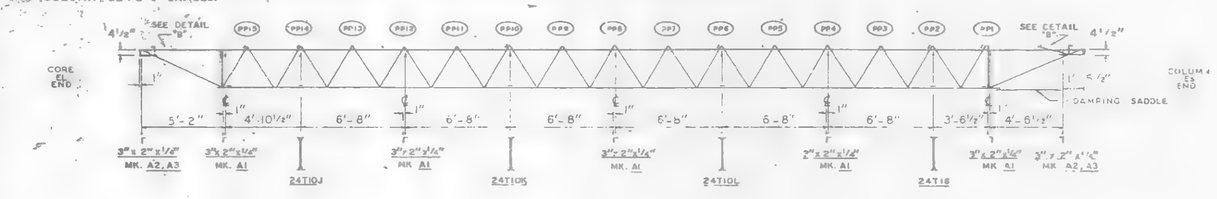
FABRICATION BY LACLEDE STEEL COMPANY

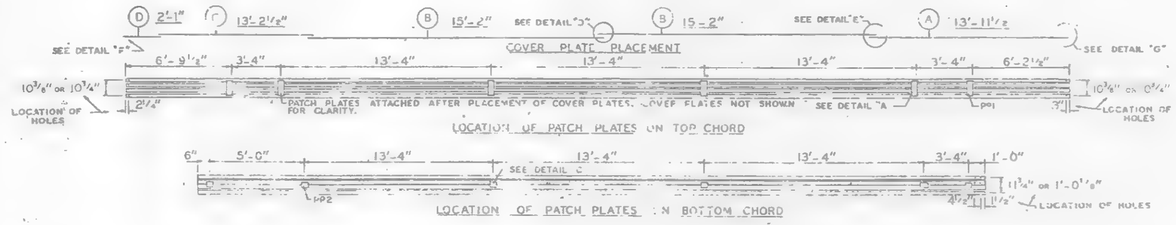
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A82-47	PLATE
APPROVED FOR FABRICATION FOR PORT A	DRAWN BY gdc DATE MARCH 28, 1969	
APPROVED FOR FABRICATION FOR FABRICATOR	CHECKED BY T.M. CHURA DATE MARCH 29, 1969	IN CHARGE OF PROD. DEV
DETAILED BY [illegible]	FABRICATION CONT. NO. 221	SHEET NO. FP D3N

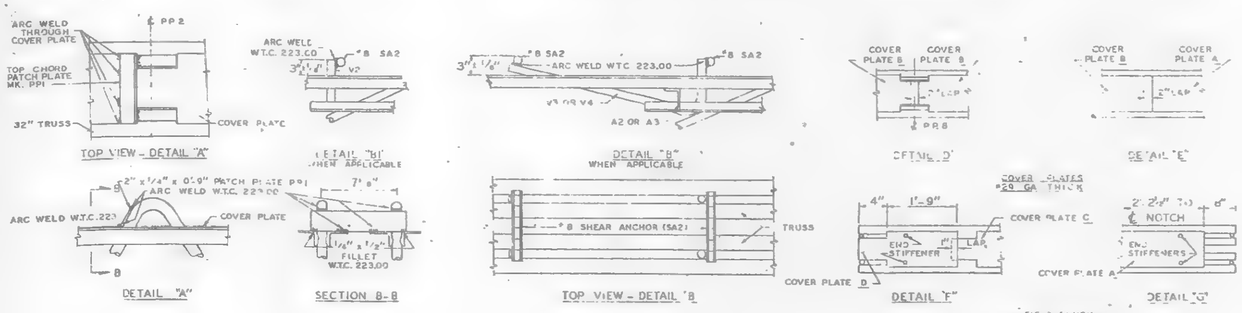


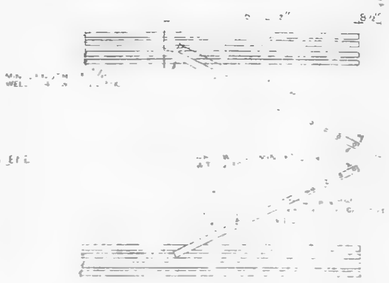
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

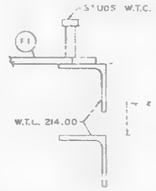
PANEL NO. D3C SIZE 20' x 59'-8"











CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				FF
MATERIAL	MK	FQ	SIZE	DRWG
FLOOR TRUSSES	T27C	1	C32T27C - 59'-8"	ST 227C
	T28C	1	C32T28C - 59'-8"	ST 228C
	T29C	2	C32T29C - 59'-8"	ST 229C
	T30C	1	C32T30C - 59'-8"	ST 230C
	T10J	1	24T10J 59'-11"	ST 210J
	T10K	1	24T10K - 59'-11"	ST 210K
	T10L	1	24T10L - 59'-11"	ST 210L
	T16	1	24T16 - 59'-11"	ST 216
	A2	5	3" x 2" x 1/4" x 5'-11"	ST 403
	A3	4	3" x 2" x 1/4" x 5'-11"	ST 403
	A1	7	3" x 2" x 1/4" x 5'-11"	ST 403
	C	1	1" x 1" x 1/4" x 59'-8"	ST 400
FLAT PLATES	PP	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
	A	3	6" x .0135" x 13'-11 1/2"	ST 303
	B	4	6" x .0135" x 13'-11 1/2"	ST 303
	C	3	4" x .0135" x 13'-9 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1/2" x 1 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3'-6 1/2"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	10	1" ϕ x - 3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-8"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .38" x 0'-9"	ST 401

(1) ALL SHOP WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

REF DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-47	1-6-69
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
82-124	10-11-68
7-AB1-5	10-15-68
7-AB1-2 & 3	7-22-68

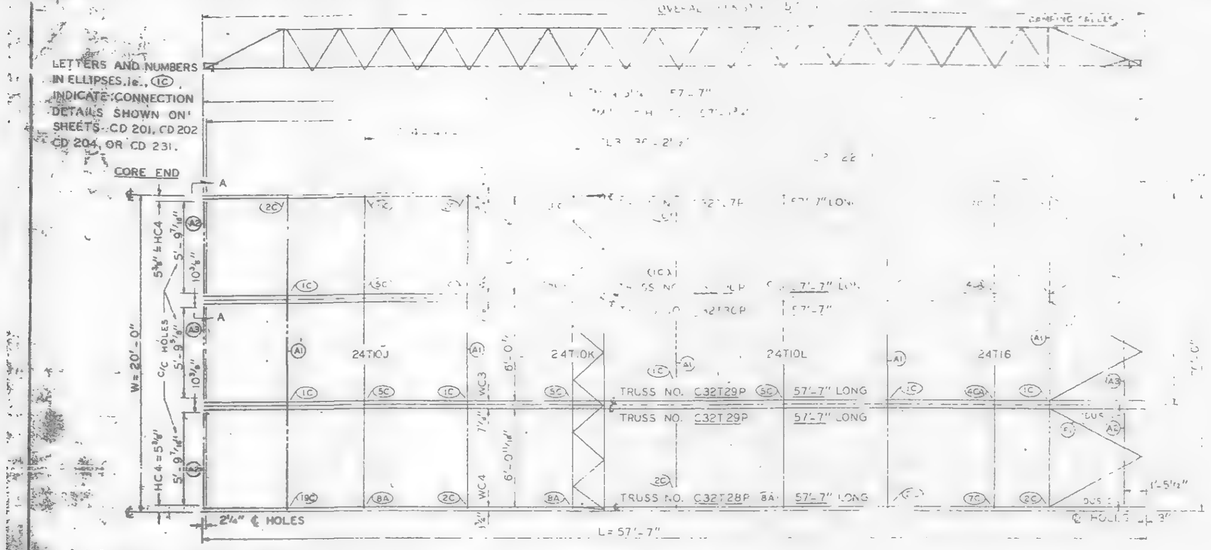
FLOOR PANEL DETAILS
FOR
ACME TRADE CENTER N.Y.C.
THE PORT OF NEW YORK AUTHORITY

BLDG. A [illegible] 78 (SOUTH)
PANEL D3C - 20' x 59'-8"
BLDG. B FLOORS 78 (EAST)

FABRICATION BY ALLEGHENY STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB2-47	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR ENGR'G	DATE 4/21/69	DRAWN BY GDL DATE MARCH 26, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M.CHURA DATE MARCH 26, 1969	IN CHARGE OF PROD. DEV
DETAILED BY [illegible] CHKD WEDER		FABRICATION CONT NO WTC 221	SHEET NO. FP D3C

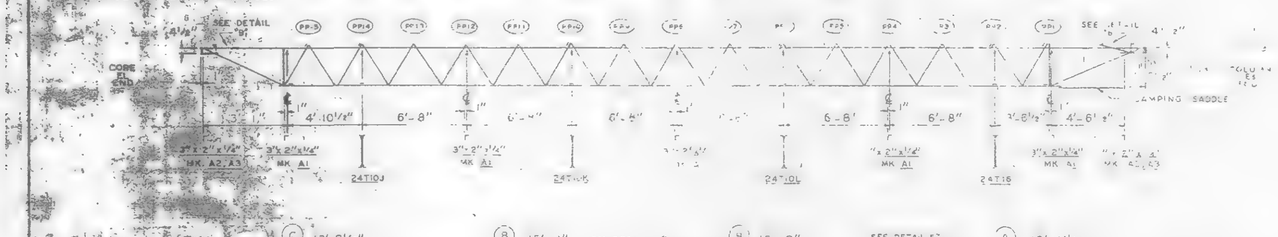
LACLEDE STEEL CO.
LACLEDE STEEL CO.

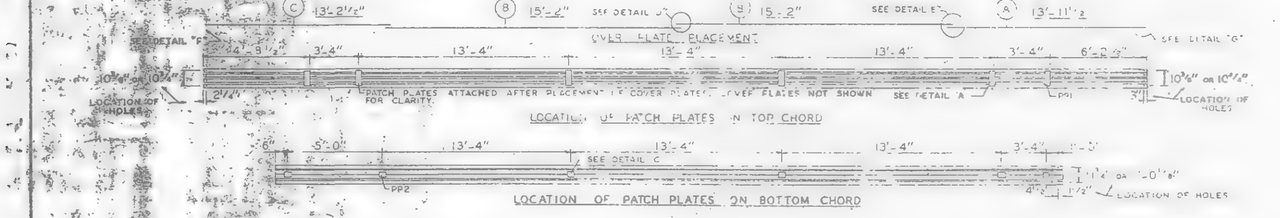
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 204, OR CD 231.

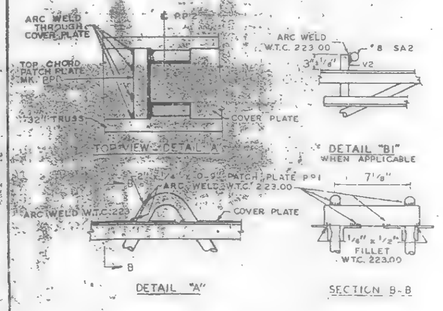


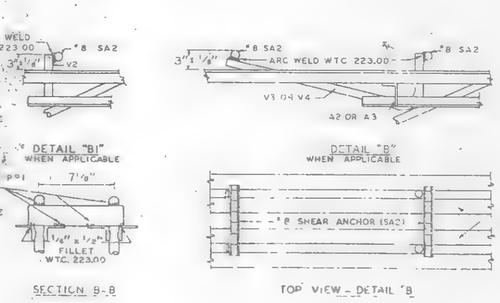
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

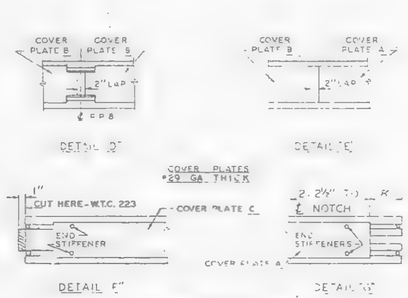
PANEL NO. D3P SIZE 20' x 57'-7"







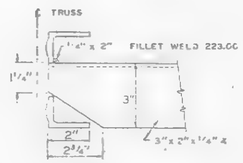




MARK	QTY	SIZE	DWG
7P	1	1.7P 57'-7"	ST 227P
8P	1	T.8P 57'-7"	ST 228P
9P	1	T.9P 57'-7"	T 229P
		T.10P 57'-7"	ST 230P
			T 20J
			T 10K
			ST 216
			T 4J
			ST 403
			4
			ST 401
			ST 401

ANGLE CLIPS	C1	24	2"x3½"x¼"x 0'-6"	ST 400
*8 SHEAR ANCHOR	SA2	9	*8 SHEAR x 0'-9"	ST 401
CAMPING SADDLE	CS1	2	3/8" x 3½" x 3'-6"	ST 298
	CS2	2	3/8" x 3½" x 6'-6"	ST 298
CONNECTION L.A.	CS3	10	¼ x 1'-3"	ST 400
			3/8" x 3½" x 6'-6"	ST 400
SPLICE PLATES	L2	4	4 3/8" x ¾" x 0'-0"	ST 400
	L3	4	4 3/8" x ¾" x 0'-0"	ST 400
	PP1	2	6" x 1'-2" x ¼"	ST 401
	PP2	2	6" x 2'-6" x ¼"	ST 401

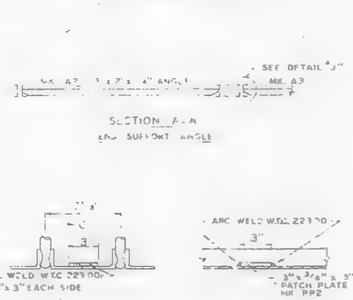
NOTES: GEN NOTES ON THE E-TH SERIES SHEETS
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION AND WELDS TO BE ¼" x 1" FULL THRU FILLET



NO	DATE	REVISION	BY

REF. DRWGS.

7-A82-5 & 11	7-22-68
7-A83-47	1-6-69
7-A84-3	10-15-68
7-A84-15 & 16	7-22-68
7-A84-42	10-15-68
SF-124	10-11-68
7-181-5	10-15-68
7-181-2 & 3	7-22-68



FLOOR PANEL DETAILS

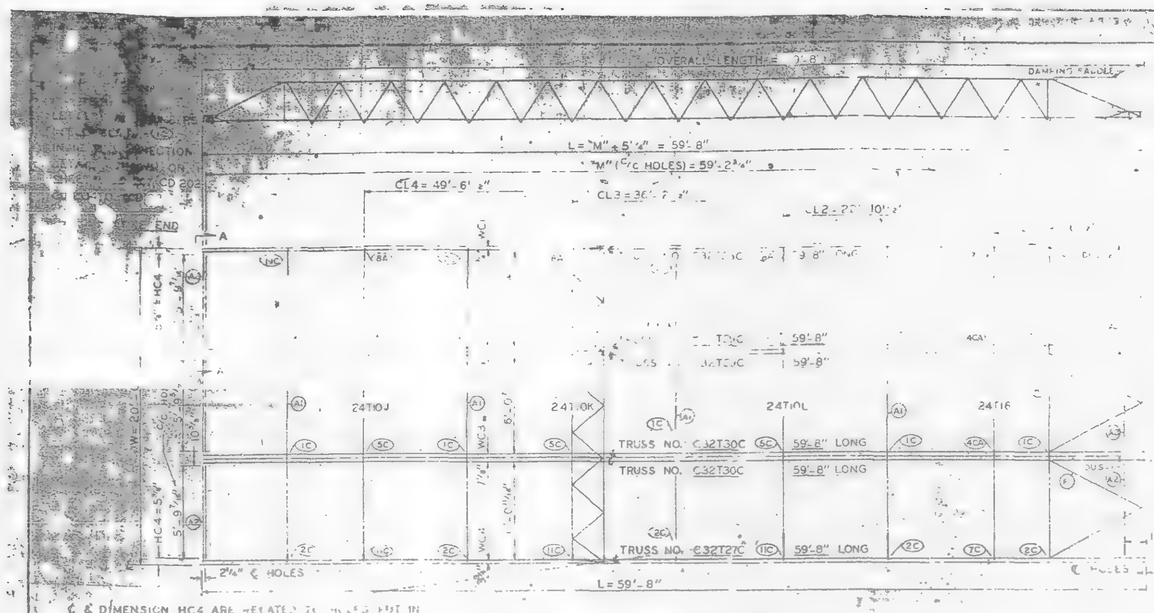
BLDG. A FLOORS 7B (NORTH)

PANEL D3P - 20' x 57'-7"

BLDG. B FLOORS 7B (WEST)

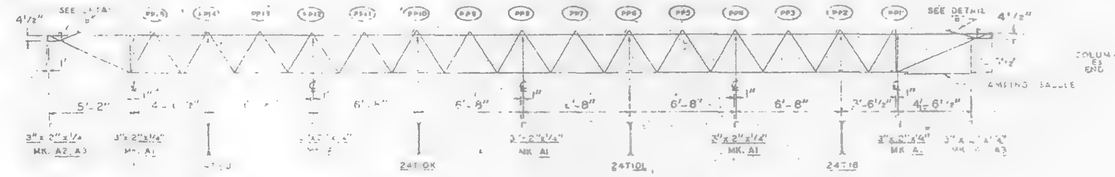
FABRICATION BY [illegible] STEEL COMPANY

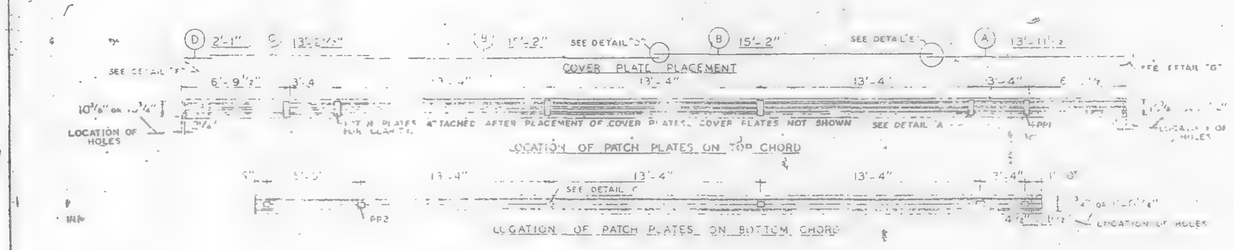
FABRICATED AT MADISON, [illegible]	DESIGN DRAWING NO 7-A83-47	PLATE
APPROVED FOR FABRICATION DATE	DRAWN BY [illegible] DATE MARCH 26 1969	
APPROVED FOR PLANT A DATE	CHECKED BY [illegible] DATE MARCH 26 1969	IN CHARGE OF PROD. DEV.
APPROVED FOR FABRICATION	FABRICATION CONT NO W.T.S. 221	SHEET NO FP D3P
ENTERED BY [illegible] CARL WEBER		

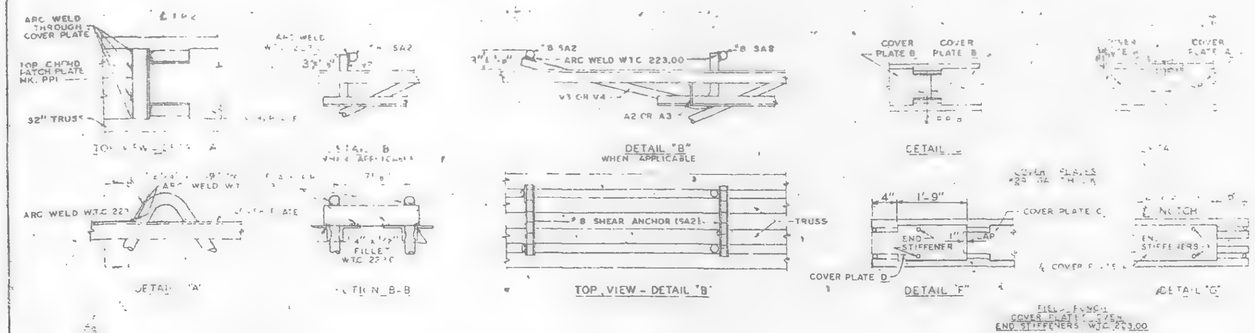


℄ & DIMENSION HC4 ARE NEEDED TO LOCATE HOLES PUNCHED IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLES ℄ OF THE COLUMN CLIPS & BRACES

PANEL NO. DR3C SIZE 20' x 59'-8"



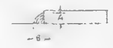


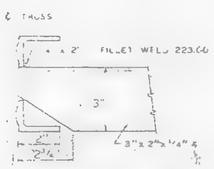


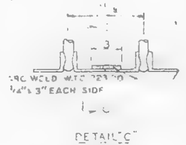
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR FIRST BEARING

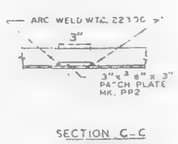
PEM PANEL		REF
MK	SIZE	NO
27C	27C - 59'-8"	ST 227C
28C	28C - 59'-8"	ST 228C
29C	29C - 59'-8"	ST 229C
30C	30C - 59'-8"	ST 230C
J	J	ST 210J
K	K	ST 210K
L	L	ST 210L
		ST 216
		ST 403
		ST 403
		ST 403
		ST 402
		ST 401
		ST 401
		ST 303
		ST 303
D	9"x .0135" x 2'-1"	ST 303
ANGLE CLIPS C1	24 2"x3"x1/4" x 0'-8"	ST 400
SHEAR ANCHOR SA2	2 = 8 REBAR x 0'-9"	ST 400
LAMPING SADDLE	1 3/8" x 3" x 3'-6 3/4"	ST 298
	FUS 2 3/8" x 3" x 3'-6 3/4"	ST 298
C NOTCH	1" x 3"	ST 400
	3'-3" x 8" x 6 1/2"	ST 400
	4'-2" x .39" x 0'-9"	ST 400
	4'-2" x .39" x 1'-0"	ST 400
	6'-2" x 3" x 2" x 0'-4"	ST 400
	4'-2" x .36" x 0'-4"	ST 401

NOTE: ALL PEM NUTS ARE MADE WITH LOW HYDROGEN ELECTRODES OR EQUAL UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS ARE FULL THROAT FILLET









NO.	DATE	REVISION	BY

PEF DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-48	1-6-69
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA 124	10-11-68
7-AB1-5	10-15-68
7-AB1-2, 3 & 4	7-22-68

FLOOR PANEL DETAILS

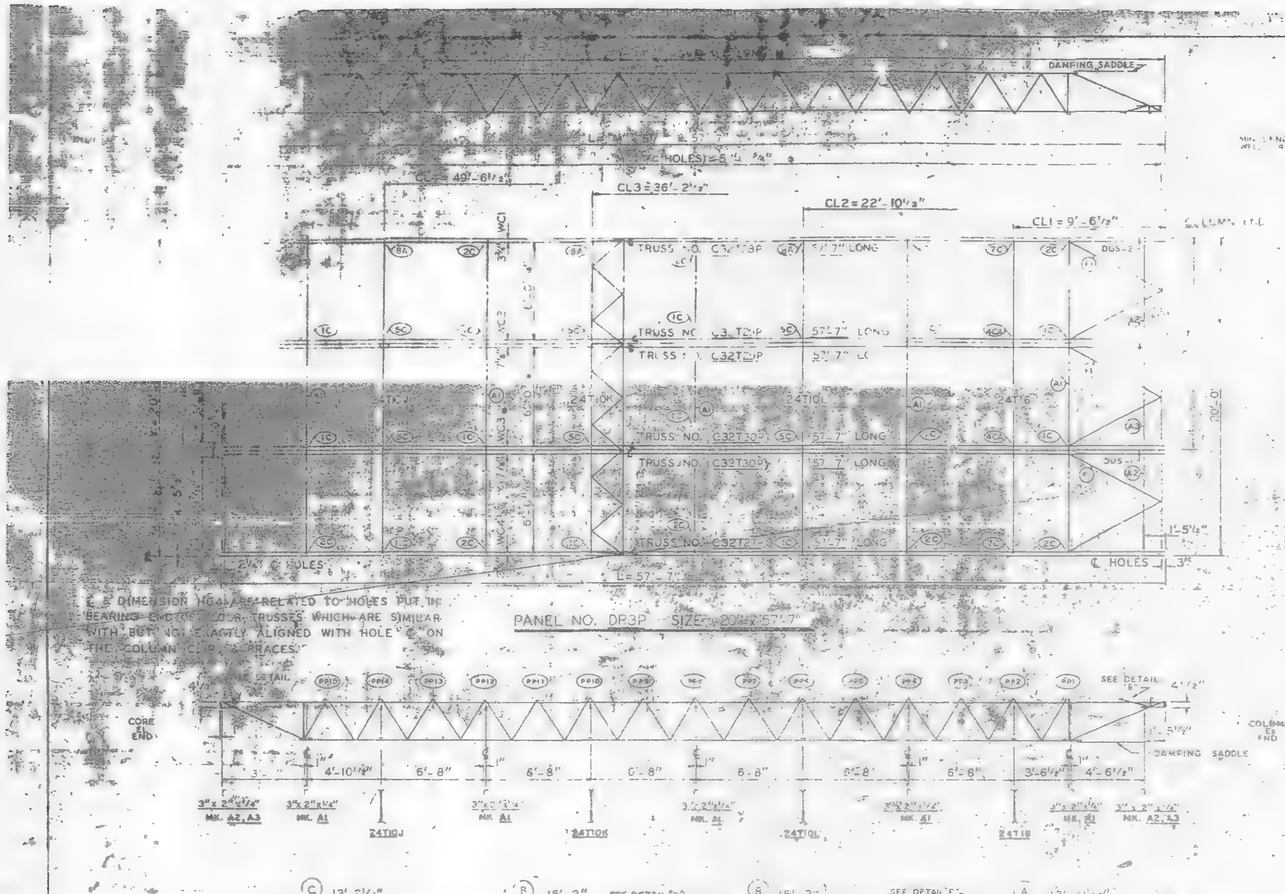
PORT AUTHORITY

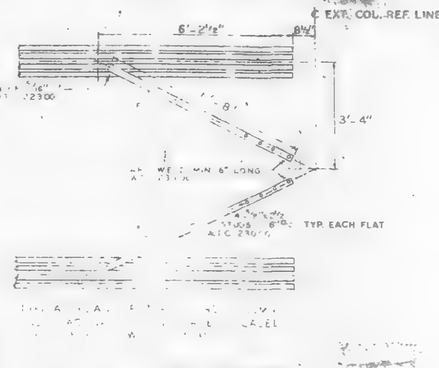
78 (SOUTH)

PANEL DR3C 20' x 59'-8"

BLDG. B FLOORS - 78 (EAST)

FABRICATOR	STEEL CORP.	
AT WALL	DESIGN DRAWING NO. 7 A53-48 1-6-69	PLATE
APPROVED FOR FABRICATION FOR OWNER	DATE 4/21/69	DRAWN BY: G.G.C. DATE MARCH 26, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE MARCH 26, 1969
DETAILED BY: [illegible]		FABRICATION-CONT NO. W1C 2213
		IN CHARGE OF PROD. DEPT.
		SHEET NO. FP DR3C



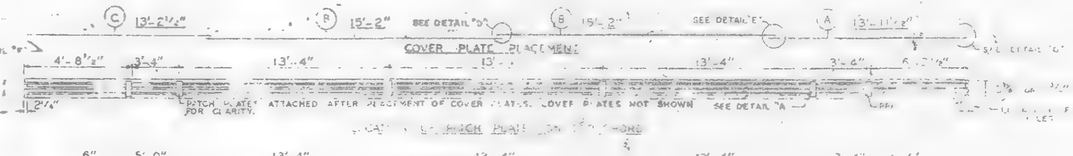


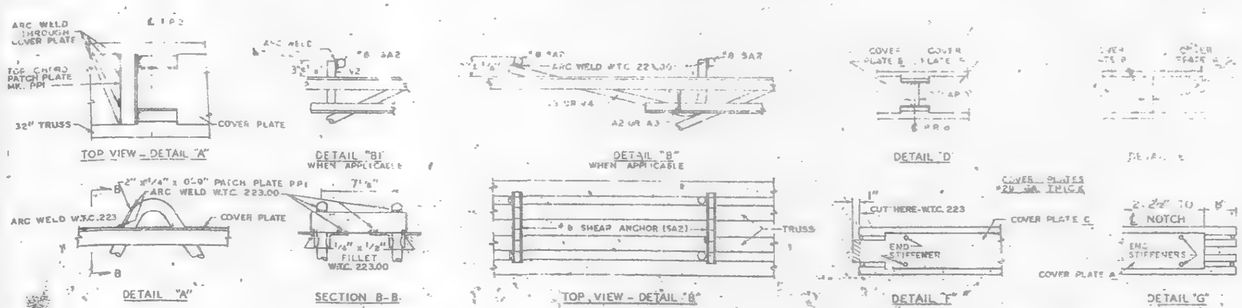
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

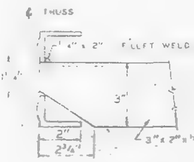
SEQUENCE	MATERIAL MK	PCS	SIZE	REF. DRWG
FOUR TRUSSES	27P	1	C32T27P – 57'-7"	ST 227P
	28P	1	C32T28P – 57'-7"	ST 228P
	29P	2	C32T29P – 57'-7"	ST 229P
	30P	2	C32T30P – 57'-7"	ST 230P
BRIDGING TRUSS	CJ	L	24T CJ – 10'-0"	ST 210J
	10K	1	24T10K – 10'-0"	ST 210K
	10L	1	24T10L – 10'-0"	ST 210L
	18	1	24T18 – 10'-11"	ST 218
ANGLE	A1	5	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-7"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-7"	ST 403
STRUT	P1	6	2" x 2" x 1/4" x 8'-8"	ST 402
PATCH PLATE	PP1	18	2" x 2" x 1/4" x 0'-6"	ST 400
	PP2	18	3" x 3" x 5/16" x 0'-3"	ST 400
	4	3	8" x .0135" x 13'-1 1/2"	ST 303
	8	8	8" x .0135" x 15'-2"	ST 303
	C	4	8" x .0135" x 13'-2 1/2"	ST 303
ANGLE CLIPS	CI	24	2 1/2" x 1 1/2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-0"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2"	ST 298
	DUS-2	4	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	10	1" x 8" x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/16" x 8'-1 1/2"	ST 400
	P2	1	4 1/2" x .36" x 0'-8"	ST 400
	P3	1	4 1/2" x .36" x 1'-0"	ST 400
	P4	3	6 1/2" x 7 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .36" x 0'-9"	ST 400

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL UNLESS OTHERWISE SHOWN. ALL CONNECTION ARC WELDS TO BE 1/2" x 1" FULL THROAT FILLET.

℄ & DIMENSION HOLES RELATED TO HOLES PUT IN BEARING STIFF. FOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIP ANGLES.







NO	DATE	REVISION	BY

REF. DRWGS.

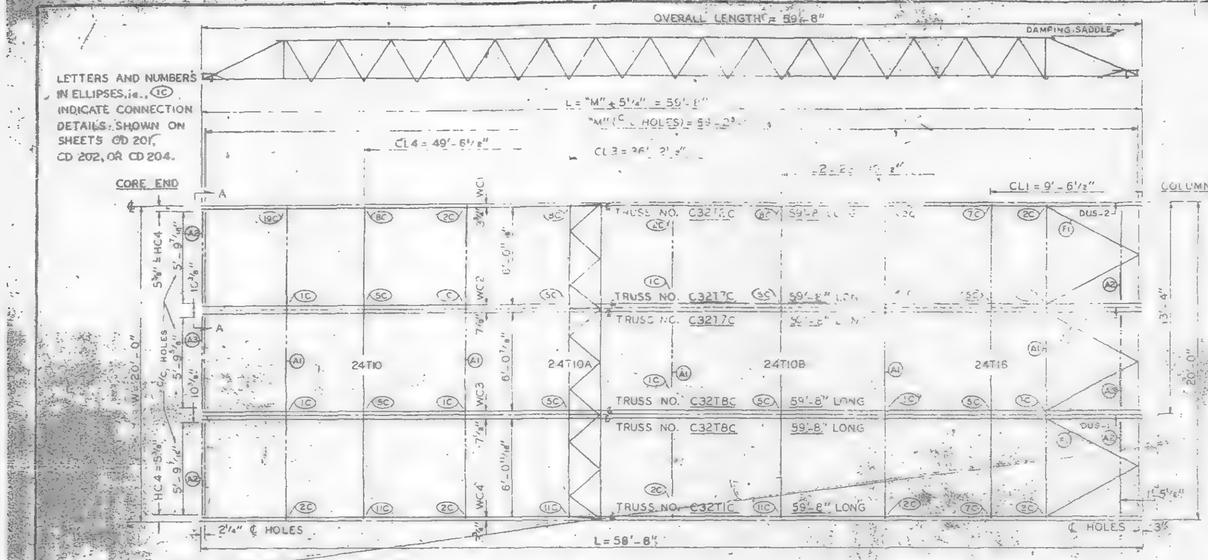
7-AB2.5&11	7-22-68
7-AB7-48	1-6-69
7-AB4-3	10-15-68
7-AB4-15&16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-5	10-15-68
AB1-2,3&4	7-22-68

FLOOR PANEL DETAILS
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A – FLOORS 78 (NORTH)
PANEL DR3P – 20' x 57'-7"
BLDG. B FLOORS – 78 (WEST)

FABRICATION BY ACME STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-48 1-6-69	PLATE
APPROVED FOR FABRICATION FOR PONYA	DATE 1/31/69	DRAWN BY: GDC DATE MARCH 26, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE MARCH 26, 1969	IN CHARGE OF PROJ. DEV.
DETAILED BY: MARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FPA DR3P

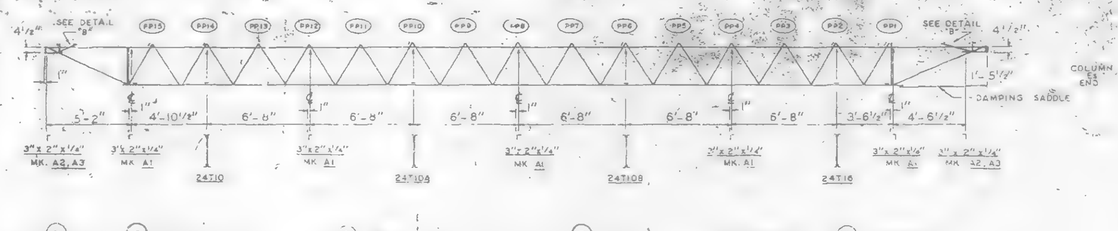
ACME STEEL CO.

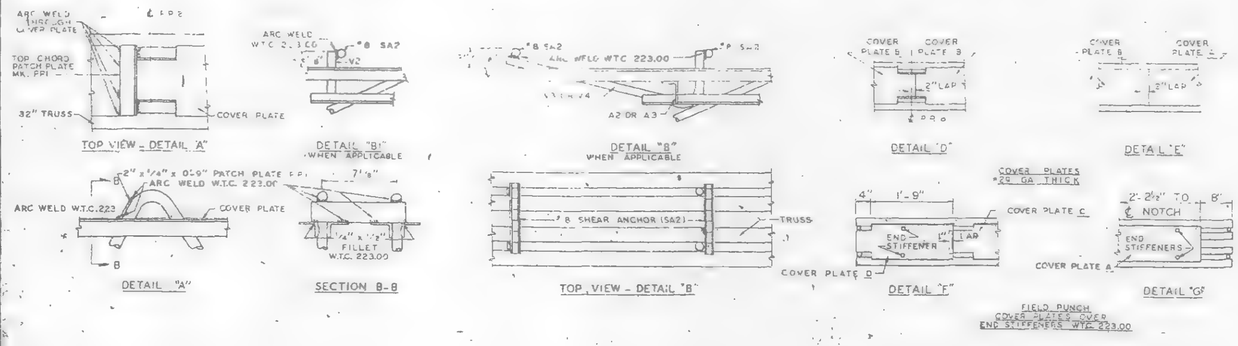
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

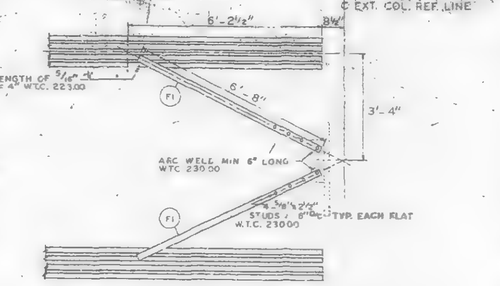


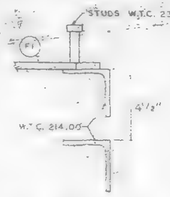
¢ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ¢ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DSC SIZE 20' x 59'-8"





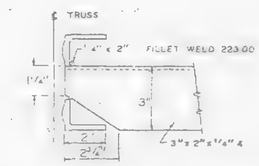


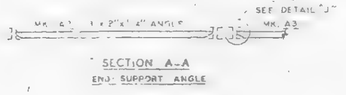


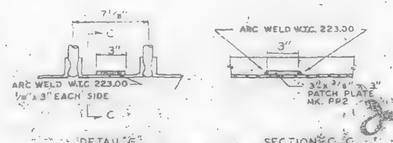
CL10 ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T1C	1	C32T1C – 59'-8"	ST 201C
	T2C	1	C32T2C – 59'-8"	ST 202C
	T7C	2	C32T7C – 59'-8"	ST 207C
	T8C	2	C32T8C – 59'-8"	ST 208C
BRIDGING TRUSSES	T10	L	24T10 – 19'-11"	BT 210
	T10A	1	24T10A – 19'-11"	BT 210A
	T10B	1	24T10B – 19'-11"	BT 210B
	T16	1	24T16 – 19'-11"	BT 216
4" x 2" x 1/4" ANGLE	A1	5	3'-0" x 2" x 3 1/4" x 19'-11"	ST 403
	A2	4	3'-0" x 2" x 3/16" x 5'-11 7/8"	ST 403
	A3	2	3'-0" x 2" x 3/16" x 5'-11 7/8"	ST 403
DIAGONAL FLATS	F1	5	1'-3 1/2" x 5/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/2" x 0'-9"	ST 400
	PP2	15	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x 0.135" x 13'-11 7/8"	ST 303
	B	8	9" x 0.135" x 15'-2"	ST 303
	C	3	9" x 0.135" x 13'-2 7/8"	ST 303
	D	3	9" x 0.135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2 1/2" x 1/2" x 1 1/4" x 0'-8"	ST 400
"B SHEAR ANCHOR	SA2	2	"B REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3" x 3'-6"	ST 298
	DUS-2	1	3/16" x 3" x 7'-8" x 3'-6"	ST 298
CONNECTION BAR	CB1	4	5/8" ϕ x 1'-3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	-	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P4	3	8 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .39" x 0'-8"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.







NO	DATE	REVISION	BY
5	8-4-69	AS NOTED	C.J.

REF. DRWGS.

7-A82-5 & 11	7-22-68
7-A83-72	11-25-68
7-A84-3	10-15-68
7-A84-15 & 16	7-22-68
7-A84-42	10-15-68
SA-124	10-11-68
7-A81-5	10-15-68
7-A81-2 & 4	7-22-68

FLOOR PANEL DETAILS

FOR

WORLD TRADE CENTER – N.Y.C.

FOR

THE PORT OF NEW YORK AUTHORITY

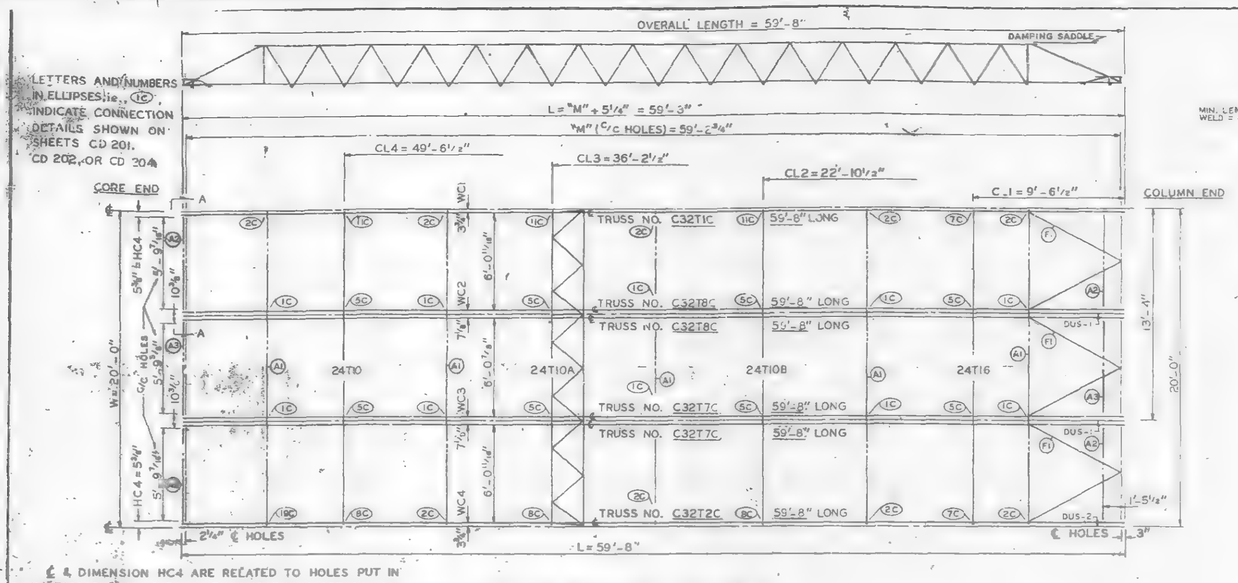
BLDG. A FLOORS 79 (SOUTH) 49 (SOUTH) ⚠

PANEL DSC 20' x 59'-8"

BLDG. B FLOORS 79 (EAST) 49 (EAST) ⚠

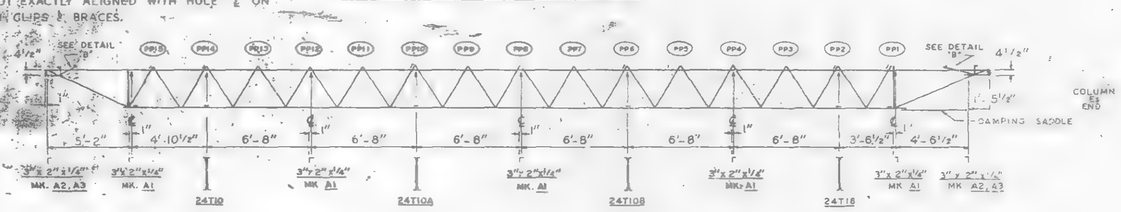
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-72 4-15-68	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 9/11/69	DRAWN BY [illegible] DATE JAN. 4 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JAN. 4 1969	IN CHARGE OF PROD. DEV.
DETAILED BY CARL ADLER		FABRICATION CONT. NO. W.T.C. - 221	SHEET NO. FPDPSC

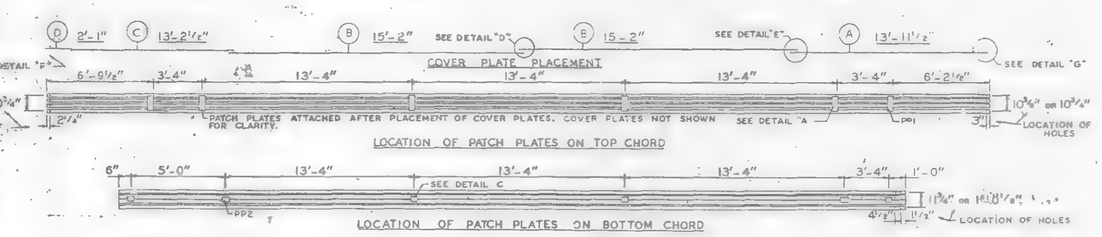
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

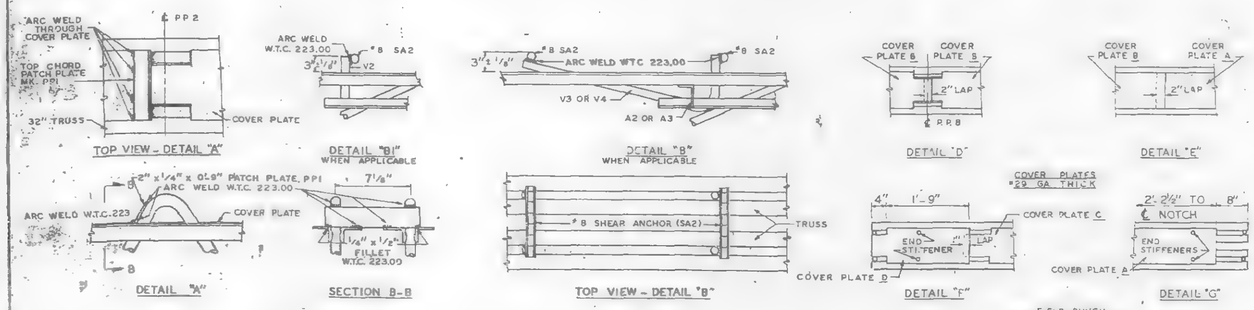


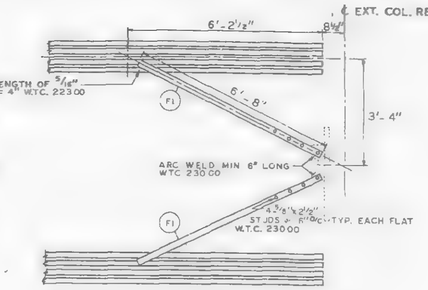
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D5C SIZE 20' x 59'-8"

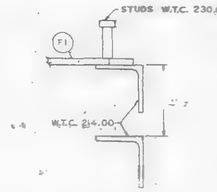








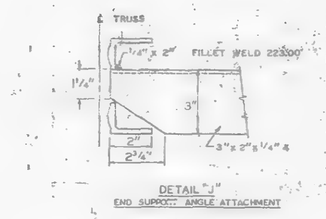
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

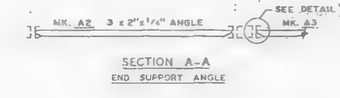


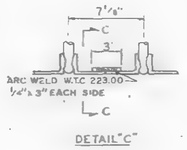
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

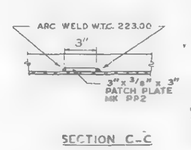
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG
FLOOR TRUSSES	T1C	1	C32T1C - 59'-8"	ST 201C
	T2C	1	C32T2C - 59'-8"	ST 202C
	T7C	2	C32T7C - 59'-8"	ST 207C
	T8C	2	C32T8C - 59'-8"	ST 208C
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	BT 210
	T10A	1	24T10A - 19'-11"	BT 210A
	T10B	1	24T10B - 19'-11"	BT 210B
	T16	1	24T16 - 19'-11"	BT 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	8	1 1/2" x 5/8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	15	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 2 1/2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	12	# 8 REBAR x 0'-5"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-8 1/2"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	5	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 8 1/8"	ST 400
	P2	1	4 1/2" x .38" x 0'-8"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .36" x 0'-8"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.









NO.	DATE	REVISION	BY

REF. DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-71	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SF-124	10-11-68
7-3B1-5	10-15-68
7-3B1-2 & 3	7-22-68

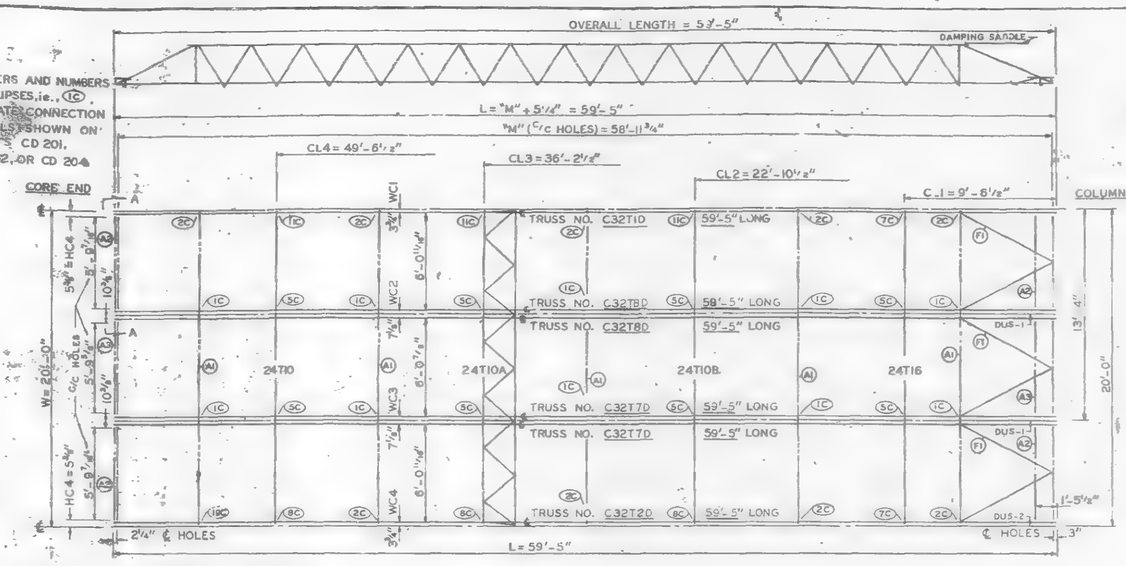
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 49 (SOUTH)
PANEL D5C - 20' x 59'-8"
BLDG. B FLOORS 49 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

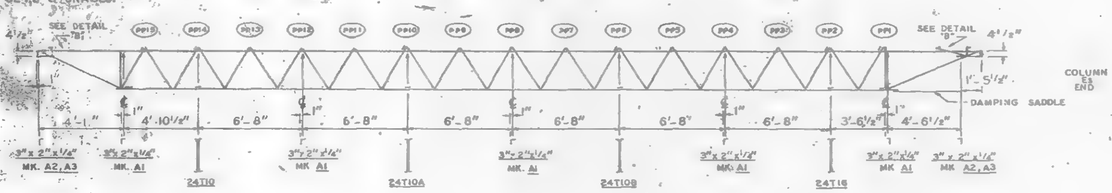
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB2-71	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE 12/4/68	DRAWN BY: G&C DATE JAN. 14, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JAN. 14, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: G. & C. LAMB LETTER CO.		FABRICATION CONT. NO. W.T.C. 221 -	SHEET NO. FP D5C

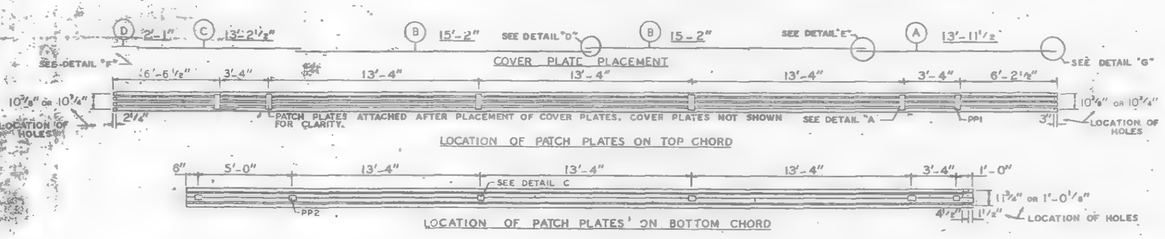
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

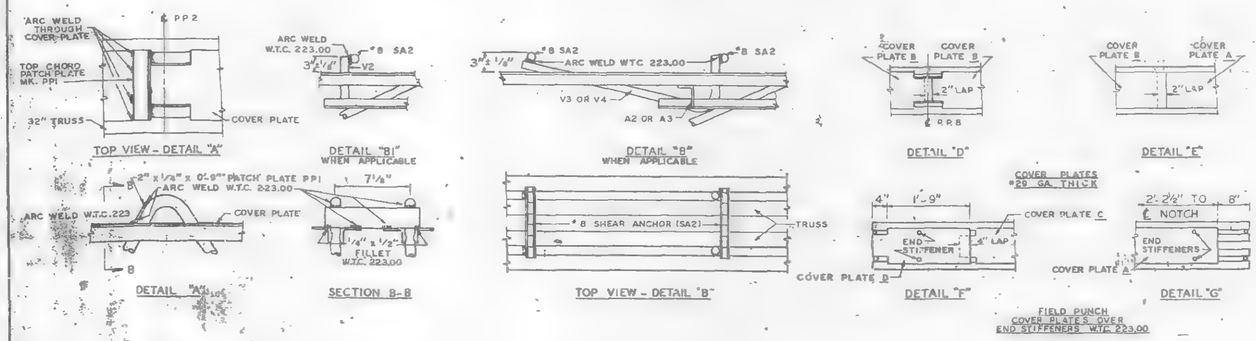


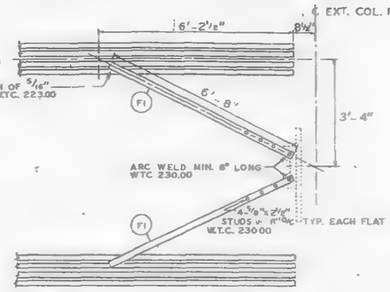
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D5D SIZE 20' x 59'-5"

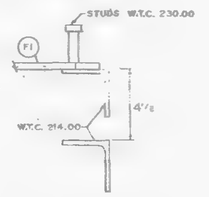








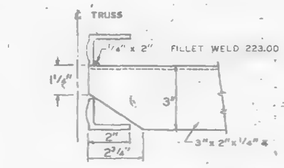
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

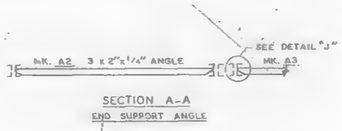


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T1D	1	C32T1D - 59'-5"	ST 201D
	T2D	1	C32T2D - 59'-5"	ST 2020
	T7D	2	C32T7D - 59'-5"	ST 2070
	T8D	2	C32T8D - 59'-5"	ST 208D
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3"x 2"x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 13/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 13/16"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-8"	ST. 400
3/8 SHEAR ANCHOR	SA2	9	3/8 B REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/8"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 3/8"	ST 298
CONNECTION BAR	C81	4	1" ϕ x 1'-3"	ST 400
	C84	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-8"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	5 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .38" x 0'-9"	ST 401

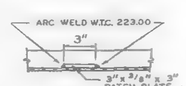
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUA...
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





SECTION A-A
END SUPPORT ANGLE

DETAIL "C"



SECTION C-C

NO.	DATE	REVISION 1	BY

REF. DRWGS.

7-A82-5 & 11	7-22-68
7-A83-71	11-25-68
7-A84-3	10-15-68
7-A84-15 & 16	7-22-68
7-A84-42	10-15-68
SE-124	10-11-68
7-A81-5	10-15-68
7-A81-2 & 3	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 81-82 (NORTH)

PANEL D5D - 20' x 59'-5"

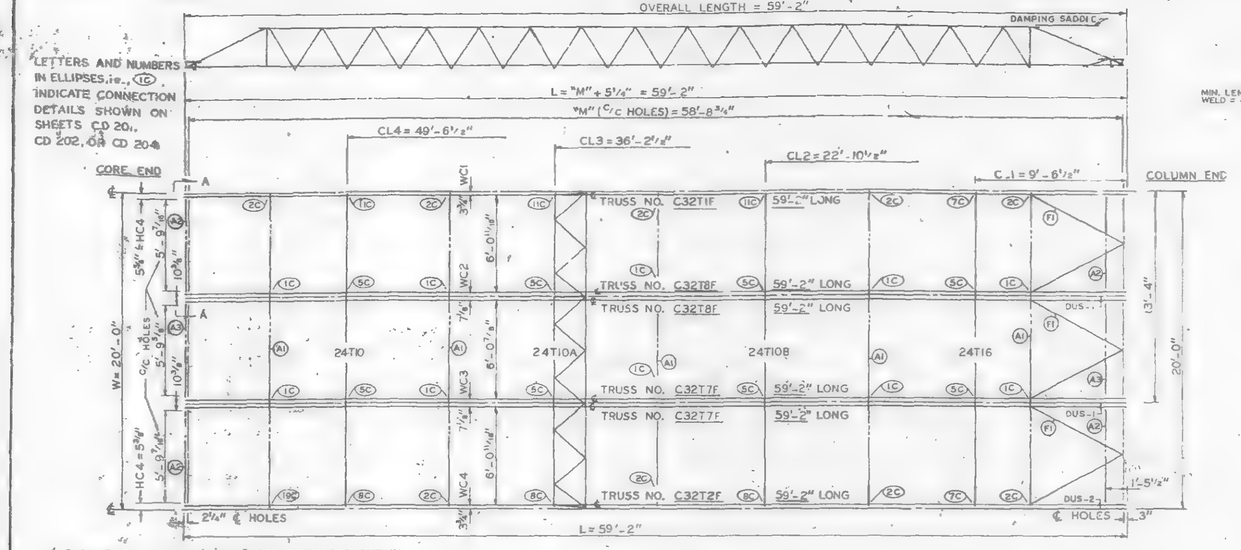
BLDG. B FLOORS 81-82 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-71	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE	DRAWN BY: ddc DATE JAN. 14, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JAN. 14, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP D5D

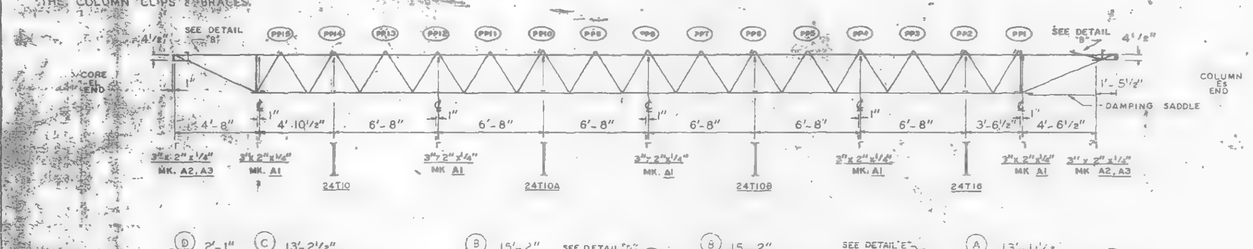
LACLEDE STEEL CO.

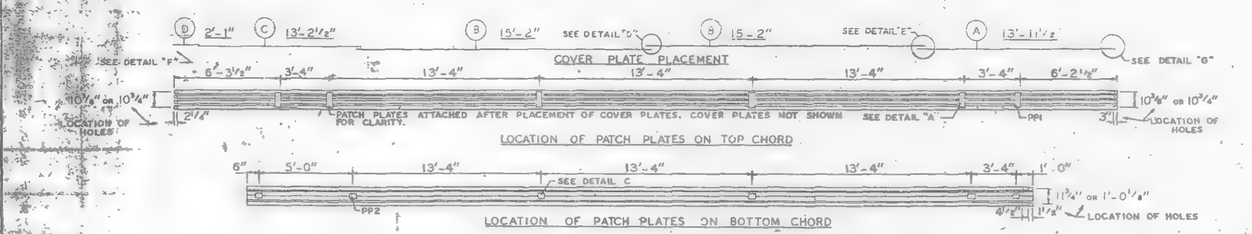
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

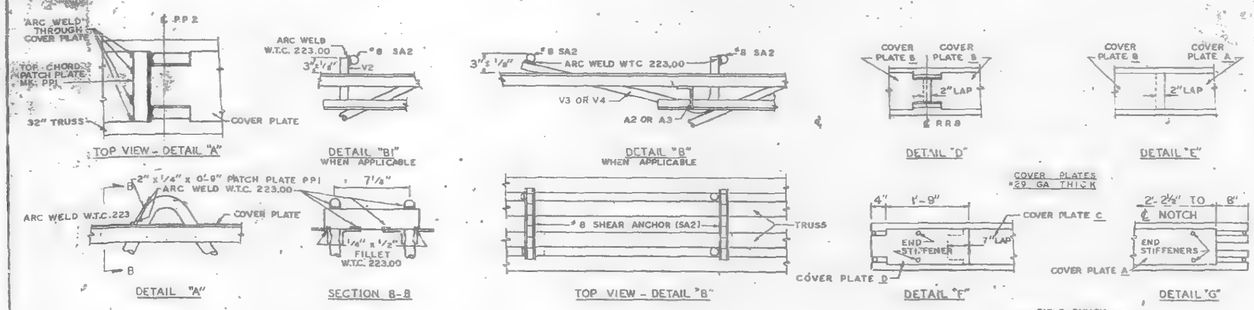


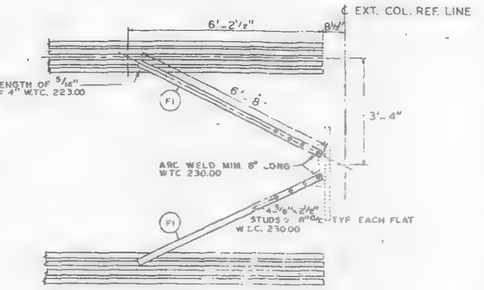
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. D5F SIZE 20' x 59'-2"

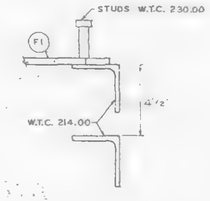








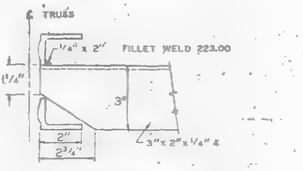
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T1F	1	C32T1F - 59'-2"	ST 201F
	T2F	1	C32T2F - 59'-2"	ST 202F
	T7F	2	C32T7F - 59'-2"	ST 207F
	T8F	2	C32T8F - 59'-2"	ST 208F
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 218
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1'-4 3/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1'-4 3/4" x 5'-11 7/8"	ST 403
	A3	2	3" x 2" x 1'-4 3/4" x 8'-11 7/8"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 5/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x 0.135" x 13'-11 1/2"	ST 303
	B	6	9" x 0.135" x 15'-2"	ST 303
	C	3	9" x 0.135" x 13'-2 3/8"	ST 303
	D	3	9" x 0.135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2 1/2" x 1/2" x 1'-8"	ST 400
5/8 SHEAR ANCHOR	SA2	2	5/8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3 1/2" x 3'-0 3/4"	ST 298
	DUS-2	1	3/16" x 3 1/2" x 2'-6 3/4"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 300
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/16" x 3 1/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x 30" x 0'-8"	ST 400
	P3	1	4 1/2" x 36" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x 39" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

DETAIL "C"

SECTION C-C

NO.	DATE	REVISION	BY

REF. DRWGS.

T-AB2-5 & 11	7-22-68
T-AB3-71	11-25-68
T-AB4-3	10-5-68
T-AB4-15 & 16	7-22-68
T-AB4-42	10-15-68
SP-124	10-14-68
T-AB1-5	10-10-68
T-AB1-2 & 3	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47 & 48 (SOUTH)

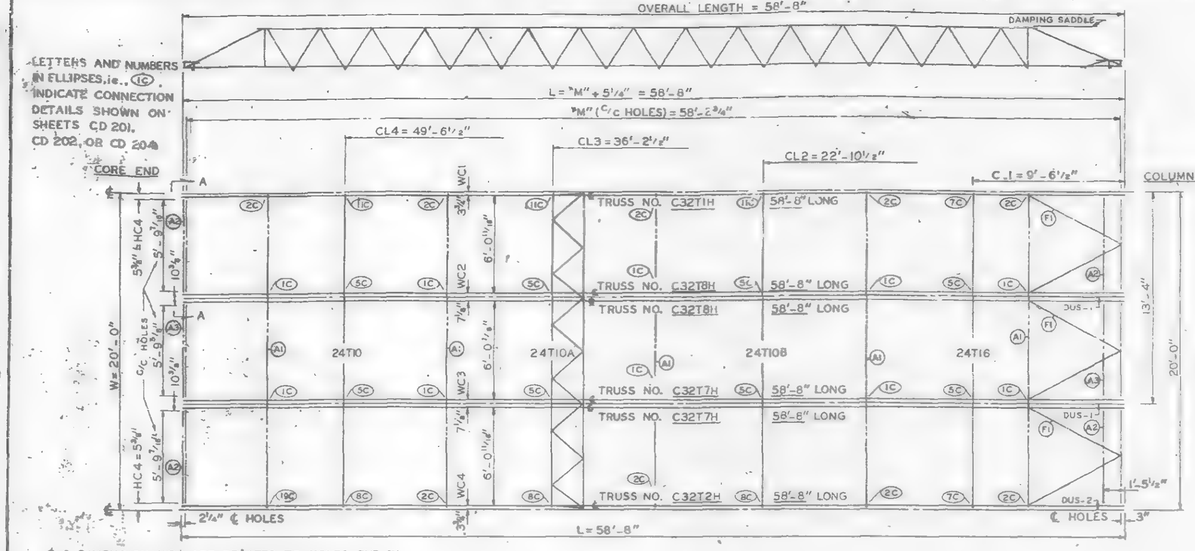
PANEL D5F - 20' x 59'-2"

BLDG. B FLOORS 47 & 48 (EAST)

FABRICATION BY: LACLEDE STEEL COMPANY

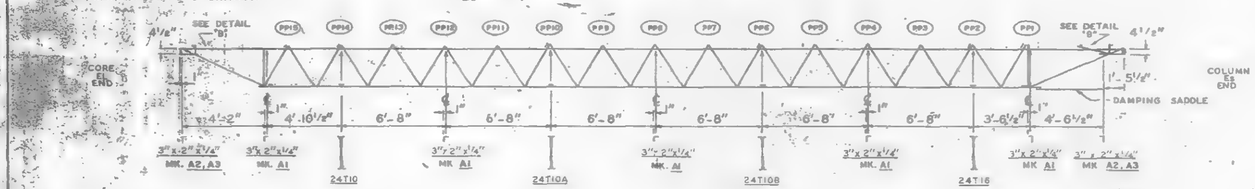
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. T-AB2-71	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE 7/31/69	DRAWN BY: GGC DATE JAN. 14, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JAN. 14, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: M. CRAIG WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP D5F

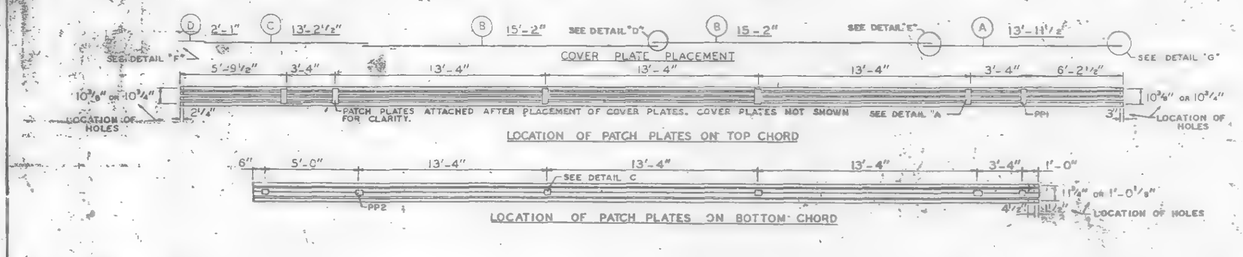
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204

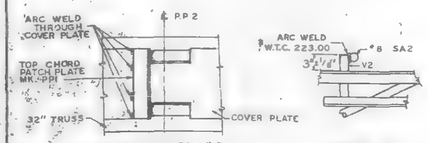


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

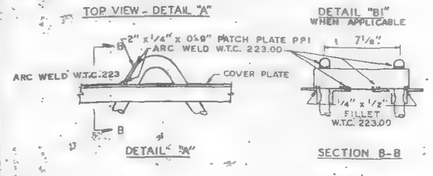
PANEL NO. D5H SIZE 20' x 58'-8"







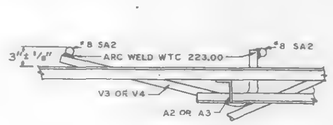
TOP VIEW - DETAIL "A"



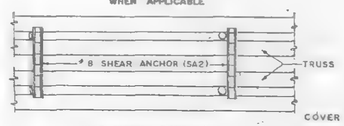
DETAIL "A"

SECTION B-B

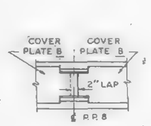
DETAIL "B1" WHEN APPLICABLE



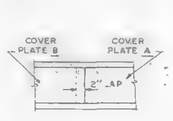
DETAIL "B" WHEN APPLICABLE



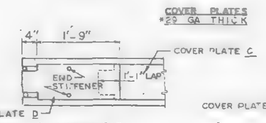
TOP VIEW - DETAIL "B"



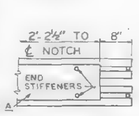
DETAIL "D"



DETAIL "E"

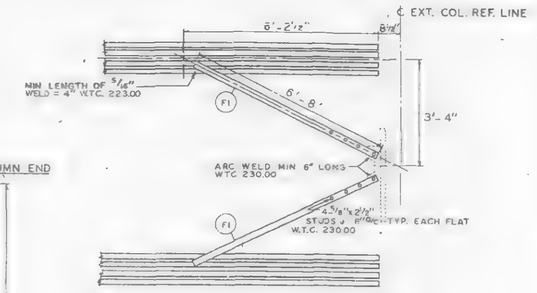


DETAIL "F"

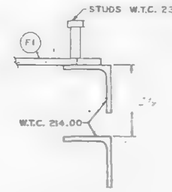


DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



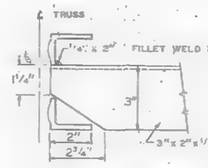
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

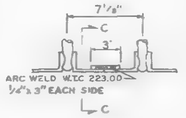
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T1H	1	C32T1H - 58'-8"	ST 201H
	T2H	1	C32T2H - 58'-8"	ST 202H
	T7H	2	C32T7H - 58'-8"	ST 207H
	T8H	2	C32T8H - 58'-8"	ST 208H
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	BT 210
	T10A	1	24T10A - 19'-11"	BT 210A
	T10B	1	24T10B - 19'-11"	BT 210B
	T16	1	24T16 - 19'-11"	BT 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-1" PLUS	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	15	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	8" x .0135" x 13'-11"	ST 303
	B	8	8" x .0135" x 15'-2"	ST 303
	C	3	8" x .0135" x 13'-2"	ST 303
	D	3	8" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 2" x 3'-5 1/2"	ST 228
	DUS-2	1	3 1/2" x 3 1/2" x 2" x 3'-6 1/2"	ST 229
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	8	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .38" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

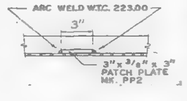


DETAIL "J" END SUPPORT ANGLE ATTACHMENT

SECTION A-A END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

NO.	DATE	REVISION	BY

REF. DRWGS.

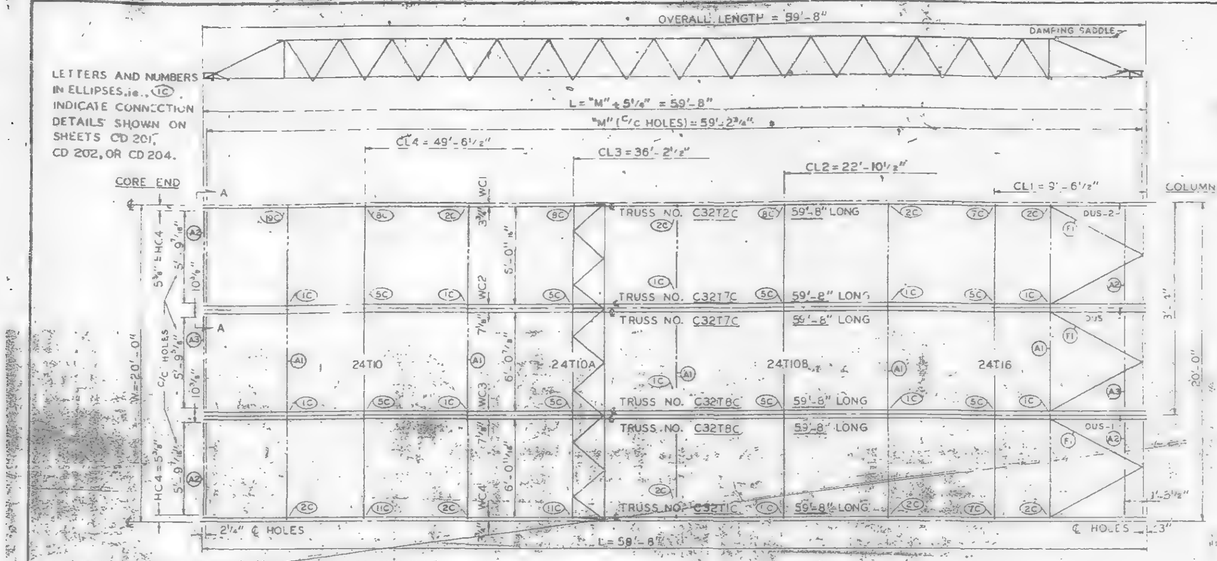
7-AB2-5 & 11	7-22-68
7-AB3-71	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SP-124	10-11-68
7-AB1-5	10-15-68
7-AB1-2 & 3	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 79-80 (NORTH)
PANEL D5H - 20' x 58'-8"
BLDG. B FLOORS 79-80 (WEST)

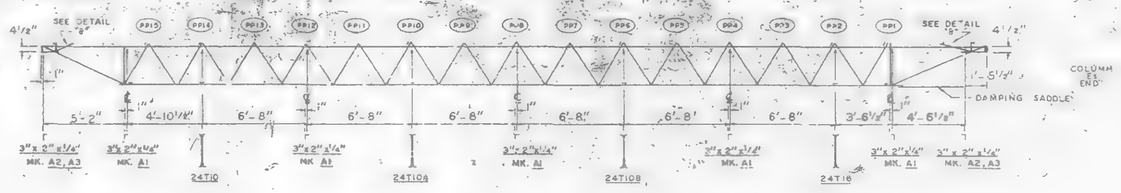
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB2-71	PLATE
APPROVED FOR FABRICATION BY: FOR P.O.N.Y.A.	DATE 11/14/68	DRAWN BY gdc DATE JAN. 14, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JAN. 16, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP D5H

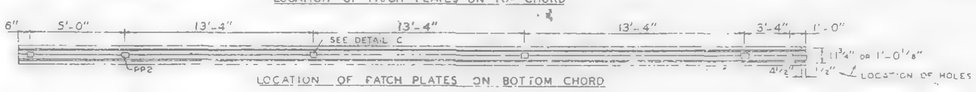


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

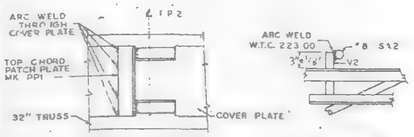
PANEL NO. DRSC SIZE 20' x 59'-8"



LOCATION OF PATCH PLATES ON TOP CHORD

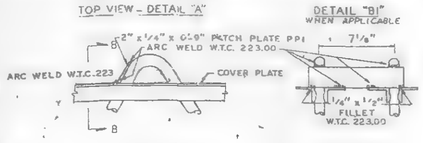


LOCATION OF PATCH PLATES ON BOTTOM CHORD

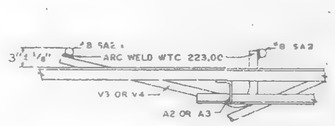


TOP VIEW - DETAIL "A"

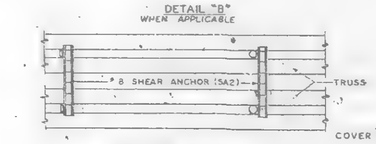
DETAIL "B1" WHEN APPLICABLE



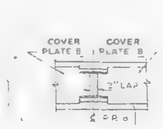
DETAIL "A" SECTION B-B



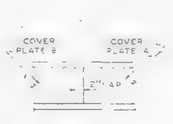
DETAIL "B" WHEN APPLICABLE



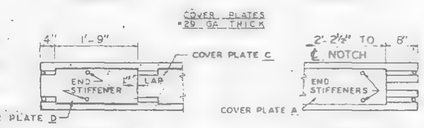
TOP VIEW - DETAIL "B"



DETAIL "D"

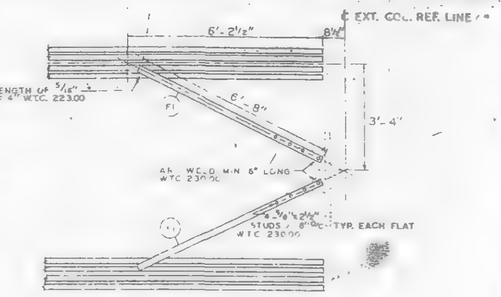


DETAIL "E"

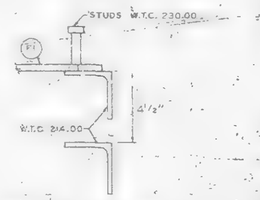


DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



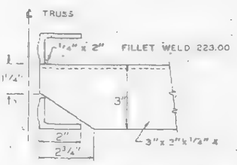
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



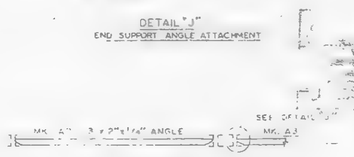
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T1C	1	C32T1C - 59'-8"	ST 201C
	T2C	1	C32T2C - 59'-8"	ST 202C
	T7C	2	C32T7C - 59'-8"	ST 207C
	T8C	3	C32T8C - 59'-8"	ST 208C
BRIDGING TRUSSES	T10	4	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T16	1	24T16 - 19'-11"	ST 216
3" x 2" x 1/4" ANGLE	A	5	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
DIAGONAL FLATS	F1	8	1" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 3/8"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2 1/2" x 1 1/2" x 1/4" x 0'-8"	ST 400
3/8 SHEAR ANCHOR	SA2	12	3/8 REBAR 7 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-5 7/8"	ST-298
	DUS-2	1	3 1/2" x 3 1/2" x 3/16" x 3'-5 7/8"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	8	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3/16" x 2 1/16" x 6 3/4"	ST 400
	P2	1	4 1/8" x .30" x 0'-8"	ST 400
	P3	1	4 1/4" x .30" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .30" x 0'-8"	ST 401

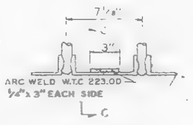
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLETS.



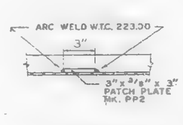
DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

NO	DATE	REVISION	BY

REF. DRWGS.

7-A82-5 & 11	7-22-68
7-A83-72	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-1-68
7-AB1-5	10-15-68
7-AB1-2, 3 & 4	7-22-68

SKILLING-HELLE CHRISTIANSEN-ROBERTSON Structural & Civil Engineers

FLOOR PANEL DETAILS FOR WORLD TRADE CENTER - N.Y.C. FOR THE PORT OF NEW YORK AUTHORITY

APPROVED 7/31/69 CANCELLED

BLDG. A FLOORS 79 (SOUTH) 79(SOUTH)

PANEL DRSC - 20' x 59'-8"

BLDG. B FLOORS 79 (EAST) 49(EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY _____ FOR P.O.N.Y.A. DATE _____

APPROVED FOR FABRICATION BY _____ FOR FABRICATOR DATE _____

DETAILED BY A. CARL WEBER

DESIGN DRAWING NO. 7-AB3-72 4-15-68

DRAWN BY: ADC DATE JAN. 14, 1969

CHECKED BY: T.M. CHURA DATE JAN. 14, 1969

FABRICATION CONT. NO. W.T.C. 221

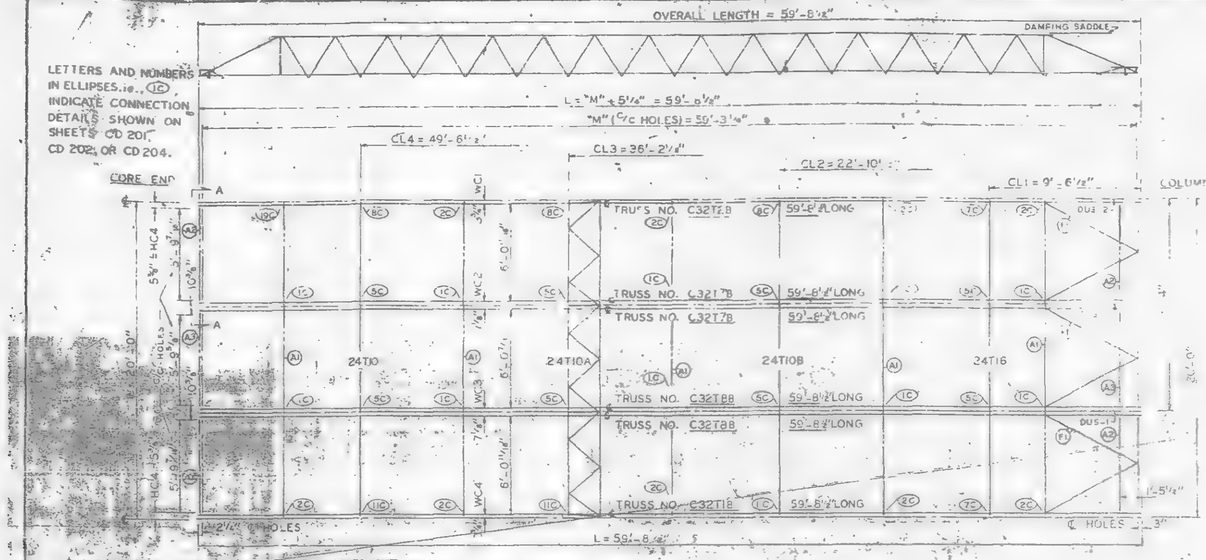
PLATE

IN CHARGE OF PROD. DEV.

SHEET NO. FP DRSC

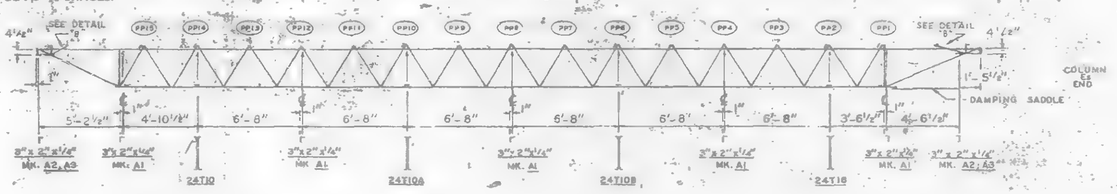
WTC1-131-LERA

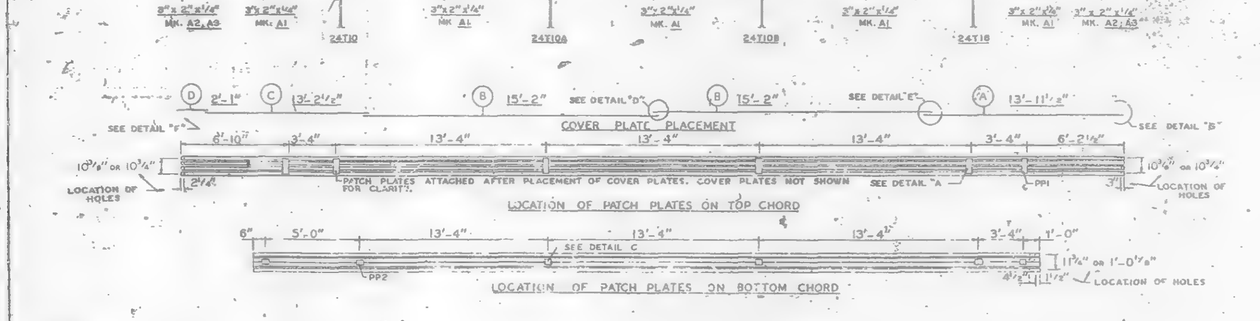
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

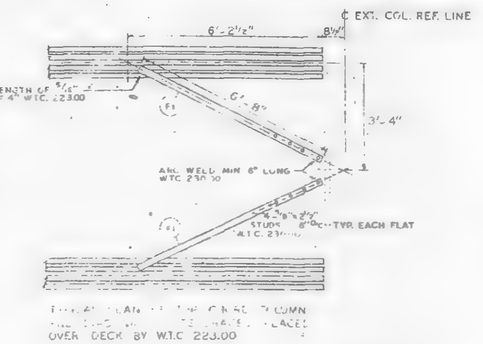


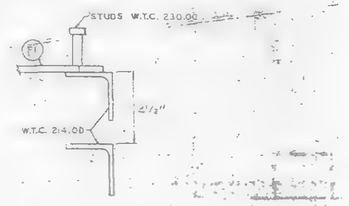
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DR5B, SIZE 20' x 59'-8 1/8"





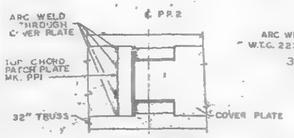




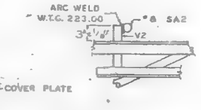
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 6 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T1B	1	C32T1B - 59'-8 1/8"	ST 201B
	T2B	1	C32T2B 59'-8 1/2"	ST 202B
	T7B	2	C32T7B - 59'-6 1/2"	ST 207B
	T8B	2	C32T8B - 59'-8 1/2"	ST 208B
BRIDGING TRUSSES	T1O	1	24T10 - 19'-11"	ST 210
	T10A	1	24T10A - 19'-11"	ST 210A
	T10B	1	24T10B - 19'-11"	ST 210B
	T1C	1	24T16 - 19'-11"	ST 216
3" x 2" x 4" ANGLES	A	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	5	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
DIAGONAL FLATS	F1	6	1'-11" x 3/4" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 1'-6"	ST 400
	PP2	18	3" x 3" x 0'-3"	ST 400
COVER PLATES	A	3	9" x 0.135" x 19'-11"	ST 303
	B	6	9" x .135" x 15'-0"	ST 303
	C	3	5" x 0.135" x 13'-3"	ST 303
	D	3	9" x 0.135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1/2" x 1'-1 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	12	#8 REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3" x 3'-8 1/2" x 3'-8 1/2"	ST 298
	DUS-2	1	3 1/2" x 3" x 3'-8 1/2" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	4	1" x 1" x 1'-3"	ST 400
	CB4	6	1" x 1" x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/8" x 8 1/2"	ST 400
	P2	1	4 1/2" x .38" x 0'-9"	ST 400
	P3	1	4 1/2" x .38" x 1'-0"	ST 400
	P4	3	8 1/2" x 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .38" x 0'-8"	ST 401

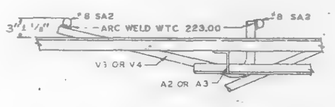
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



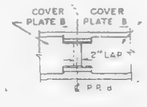
TOP VIEW - DETAIL "A"



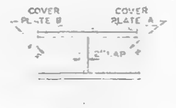
DETAIL "B1" WHEN APPLICABLE



DETAIL "B" WHEN APPLICABLE

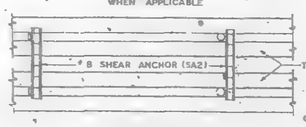


DETAIL "D"

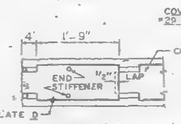


DETAIL "E"

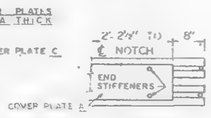
DETAIL "A" SECTION B-B



TOP VIEW - DETAIL "B"

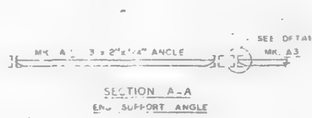


DETAIL "F"

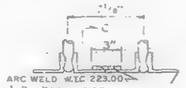


DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

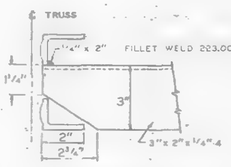


SECTION A-A END SUPPORT ANGLE



DETAIL "C"

SECTION C-C



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF. DRWGS.

7-A82-5 & 11	7-22-68
7-A83-7	11-25-68
7-A84-3	10-15-68
7-A84-15 & 18	7-22-68
7-A84-42	10-15-68
SA-124	10-11-68
7-A91-5	10-15-68
7-A81-2, 3 & 4	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83 (NORTH)

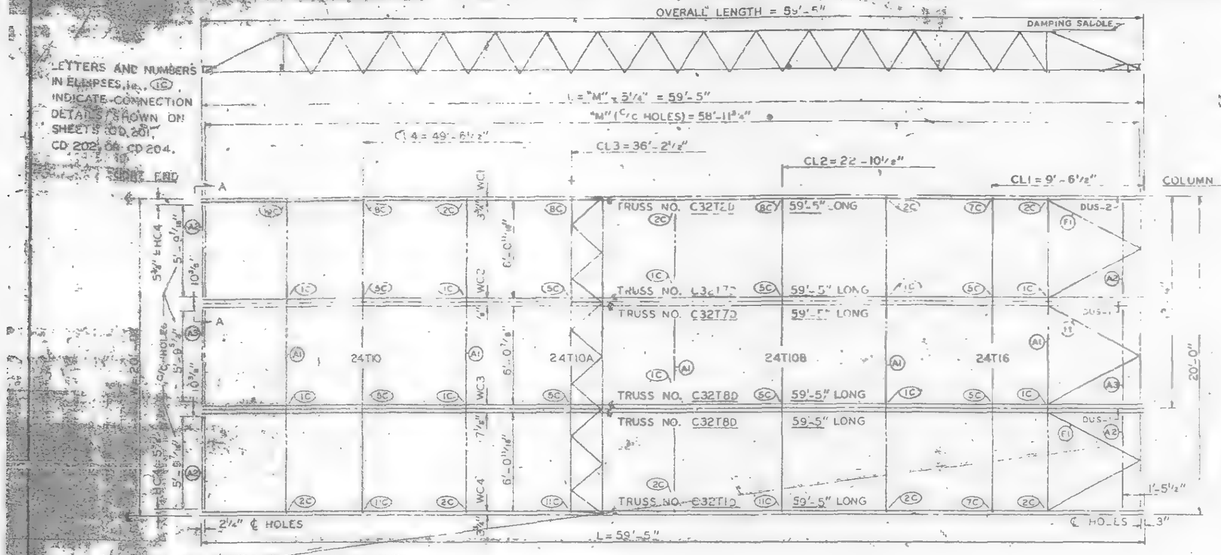
PANEL DR5B - 20' x 59'-8 1/8"

BLDG. B FLOORS 83 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

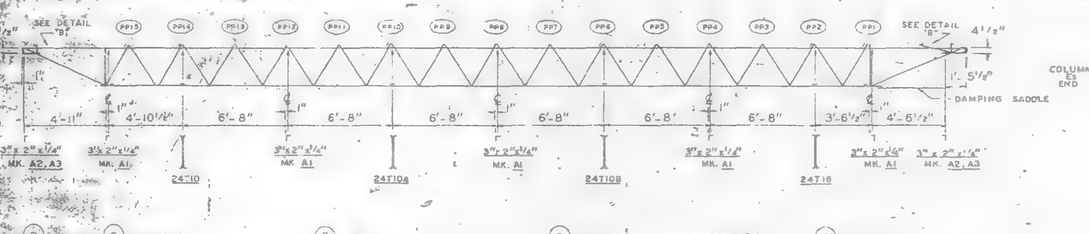
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-72 4-15-68	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A	DATE 7/31/69	DRAWN BY: g&s DATE JAN. 14, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JAN. 14, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT NO W.T.C 221	SHEET NO. FP DR5B

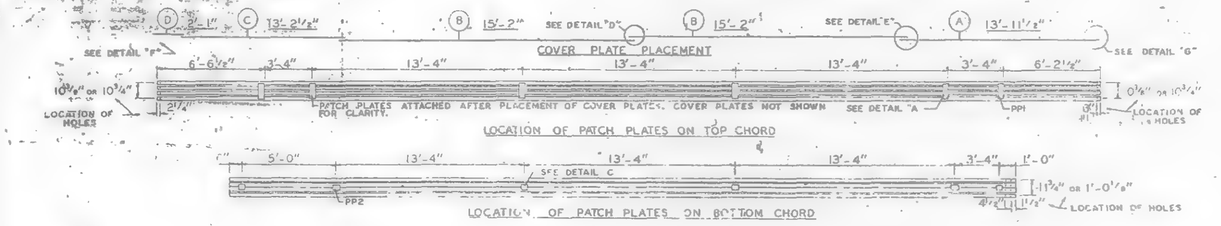
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, & CD 204.

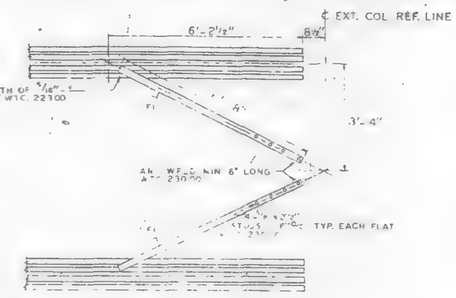


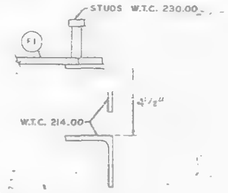
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS ℄ BRACES.

PANEL NO. DR5D - SIZE 20' x 59'-5"





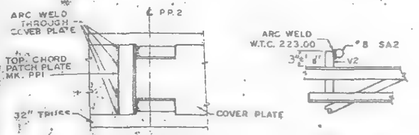




"CLIP" ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

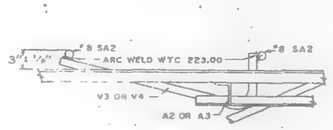
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG
FLOOR TRUSSES	T1D	1	C32T1D - 59'-5"	ST 201
	T2D	1	C32T2D - 59'-5"	ST 202
	T7D	2	C32T7D - 59'-5"	ST 207
	T8D	2	C32T8D - 59'-5"	ST 208
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	BT 210
	T10A	1	24T10A - 19'-11"	BT 210A
	T10B	1	24T10B - 19'-11"	BT 210B
	T16	1	24T16 - 19'-11"	BT 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1'-4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1'-4" x 5'-11"	ST 403
	A3	2	3" x 2" x 1'-4" x 5'-11"	ST 403
PLATE	B	6	1" x 5" x 6'-8"	ST 402
PLATE	F1	18	2" x 1" x 1'-4"	ST 400
PLATE	F2	16	3" x 3/8" x 0'-3"	ST 400
ANGLE	A	3	9" x 0135 x 3'-11 1/2"	ST 303
ANGLE	B	6	9" x 0135" x 15'-2"	ST 303
ANGLE	C	3	9" x 0135" x 13'-2 1/2"	ST 303
ANGLE	D	3	9" x 0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1/2" x 1'-4" x 0'-6"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 5'-4" x 3'-6 3/4"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 2'-8" x 3'-8 3/4"	ST 298
CONNECTION BAR	CB1	4	1 ϕ x 1 - 3"	ST 400
	CB4	6	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/8" x 8'-1 1/2"	ST 400
	P2	1	4 1/2" x 39" x 0'-9"	ST 400
	P3	1	4 1/2" x 39" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x 36" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

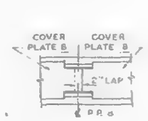


TOP VIEW - DETAIL "A"

DETAIL "B1" WHEN APPLICABLE

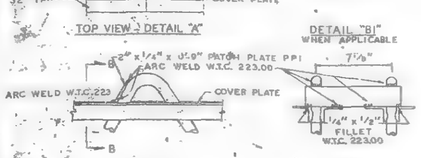


DETAIL "B" WHEN APPLICABLE



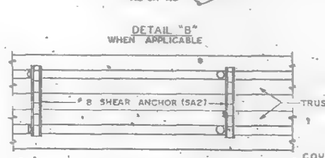
DETAIL "D"

DETAIL "E"

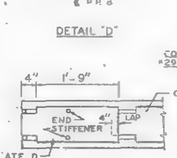


DETAIL "A"

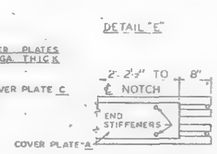
SECTION B-B



TOP VIEW - DETAIL "B"



DETAIL "F"



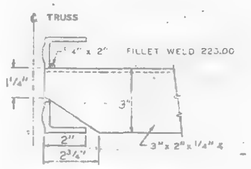
DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

SECTION A-A
END SUPPORT ANGLE

DETAIL "C"

SECTION "C-C"



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF. DRWGS.

7-AB2-5 & 11	7-22-68
7-AB3-72	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-5	10-15-68
7-AB1-2 3 & 4	7-22-68

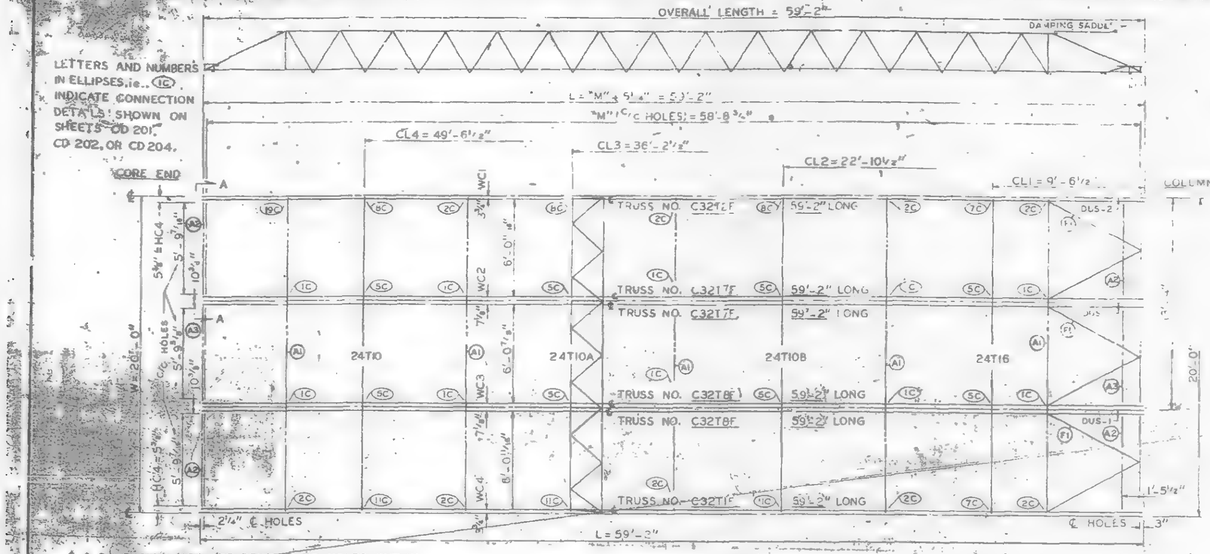
FLOOR PANEL DETAILS
FOR
ACC... TRADE ...ENTER N.Y.C.
FOR
THE ... OF NEW YORK AUTHORITY

BLDG. A FLOORS 81 & 82 (NORTH)
PANEL DR5D - 20' x 59'-5"
BLDG. B FLOORS 81 & 82 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

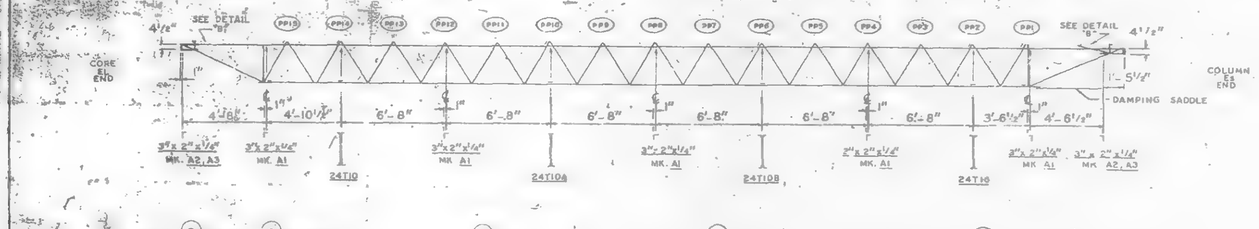
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-72 4-15-68	PLATE
APPROVED FOR FABRICATION BY ... FOR PONYA.	DATE 1/21/69	DRAWN BY: gdc DATE JAN. 14, 1969	
APPROVED FOR FABRICATION BY LACLEDE STEEL CO.	DATE	CHECKED BY: T.M.CHURA DATE JAN. 14, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: CARL WEBER		FABRICATION CONT. NO. W.T.C. 5221	SHEET NO. FP DR5D 1

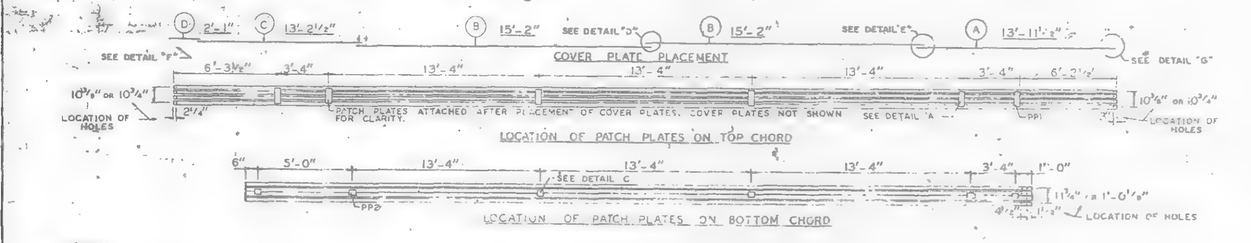
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

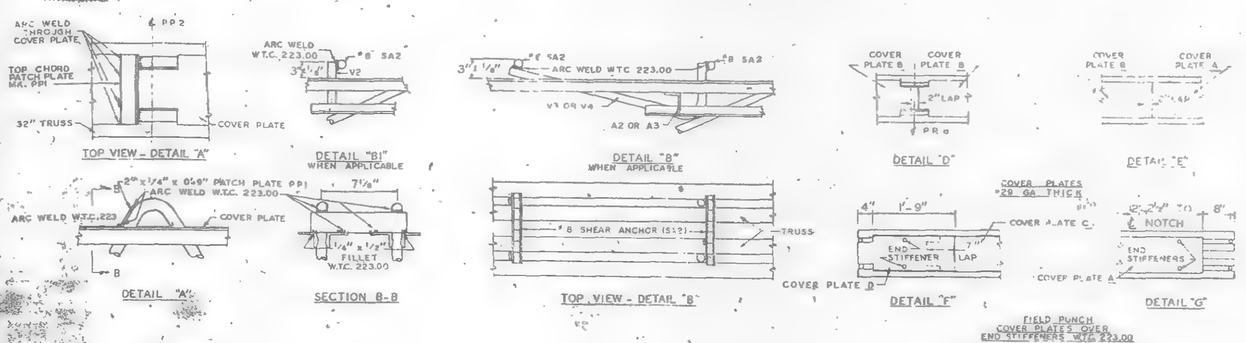


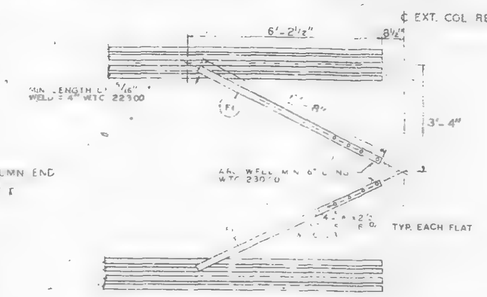
℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH, BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

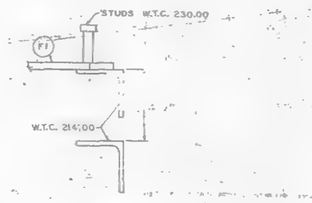
PANEL NO. DR5F, SIZE 20' x 59'-2"







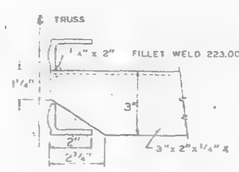


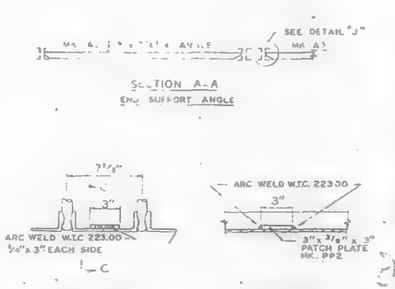


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 14 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS	SIZE	
BLOCK TRUSSES	T1F	1	C32T1F - 59'-2"	ST 201F
	T2F	1	C32T2F - 59'-2"	ST 202F
	T7F	2	C32T7F - 59'-2"	ST 207F
	T8F	2	C32T8F - 59'-2"	ST 208F
SPLICING TRUSS	PC	1	24T10 - 9'-11"	BT 210
	T10A	1	24T10A - 10'-11"	BT 2.0A
	T10B	1	24T10B - 10'-11"	BT 210B
	T16	1	24T16 - 9'-11"	BT 216
3"x2" x 4" ANGLE	A1	6	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	" x 2" x 1/4" x 5'-11 1/2"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
DIAGONAL FLAT	F1	6	1" x 3" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-2"	ST 400
	PP2	18	1" x 1/4" x 0'-3"	ST 400
COVER PLATES	A	3	1/4" x 0'-13.5" x 13'-11 1/2"	ST 303
	B	6	1/4" x 0'-13.5" x 13'-2"	ST 303
	C	3	1/4" x 0'-13.5" x 13'-2 1/2"	ST 303
	D	3	1/4" x 0'-13.5" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2 1/2" x 2 1/2" x 1/4" x 0'-6"	ST 400
" B SHEAR ANCHOR	SA2	9	" B REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/4" x 3'-0 1/4"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 3/4" x 3'-6 1/4"	ST 298
CONNECTION BAR	CB1	4	1" x 3" x 1'-3"	ST 400
	CB4	8	1" x 6" x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3/4" x 6 1/2"	ST 400
	P2	1	4 1/2" x 3/4" x 0'-9 1/8"	ST 400
	P3	1	4 1/2" x 3/8" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x 3/8" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





NO	DATE	REVISION	BY

REF. DRWGS.

7-AB2.5 & 11	7-22-68
7-AB3-72	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-5	10-15-68
7-AB1-2, 3 & 4	7-22-68

FLOOR PANEL DETAILS

FOR

A & P TRADE CENTER - N.Y.C.

FOR

THE PORT OF NEW YORK AUTHORITY

BLDG. 4 FLOORS 47 & 48 (SOUTH)

PANEL DR5F - 20' x 59'-2"

BLDG. 8 FLOORS 47 & 48 (EAST)

FABRICATION BY ALLEGHENY STEEL CORP.

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7 AB3-72 4-15-68

APPROVED FOR FABRICATION BY W.T.C. FOR P.O.N.Y.A. DATE 7/31/69

DRAWN BY: gac DATE JAN. 14, 1969

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

CHECKED BY: T.M.CHURA DATE JAN. 14, 1969

DETAILED BY: A.C. WEBER

FABRICATION CONT. NO. W.T.C. 221

IN CHARGE OF PROD. DEV.

SHEET NO. FP DR5F

STEP AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS SD 201, SD 202, SD 203, SD 204.

PC = CORE END

OVERALL LENGTH = 58'-8"

CAMPING SADDLE

L = "M" + 5 1/4" = 58'-8"

"M" (C/C HOLES) = 58'-2 3/4"

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/2"

CL2 = 22'-10"

CL1 = 9'-6"

TRUSS NO. C32T2H 58'-8" LONG

TRUSS NO. C32T7H 58'-9" LONG

TRUSS NO. C32T7H 58'-6" LONG

TRUSS NO. C32T8H 58'-8" LONG

TRUSS NO. C32T8H 58'-3" LONG

TRUSS NO. C32T1H 58'-8" LONG

24T10 24T10A 24T10B 24T16

WC1 WC2 WC3 WC4

DUS-1 DUS-2

W = 20'-0"

20'-0"

1'-5 1/8"

2 1/4" ℄ HOLES

℄ HOLES 1 3/4"

L = 58'-8"

℄ DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DR5H SIZE 20' x 58'-8"

SEE DETAIL "B" SEE DETAIL "B" 4 1/2" 5 1/2" DAMPING SADDLE

PP1 PP2 PP3 PP4 PP5 PP6 PP7 PP8 PP9 PP10 PP11 PP12 PP13 PP14

4'-2" 4'-10 1/8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6 1/2" 4'-6 1/16"

3"x2"x1/4" MK. A2, A3 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A1 3"x2"x1/4" MK. A2, A3

24T10 24T10A 24T10B 24T16

SEE DETAIL "F" SEE DETAIL "D" SEE DETAIL "E" SEE DETAIL "G"

D 2'-1" C 13'-2 1/8" B 15'-2" B 15'-2" A 13'-11 1/2"

5'-9 1/2" 3'-4" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"

10 3/16" or 10 3/4" LOCATION OF HOLES 2 1/4" 3" LOCATION OF HOLES

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY. SEE DETAIL "A" PP1

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD

6" 1'-0" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

SEE DETAIL C PP2 11 3/16" or 1'-0 1/8" 4 1/2" 1 1/2" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD

EXT. COL. REF. LINE

6 - 1 1/2" 8 1/4" 9" 3'-4" 4 - 2" @ 6" TYP. EACH FLAT

TYP. AT FLAT OF T.C. OF COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

STUDS W.T.C. 230.00 4 1/2" W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T1H	1	C32T1H - 58'-8"	ST 201H
	T2H	1	C32T2H - 58'-8"	ST 202H
	T7H	2	C32T7H - 58'-8"	ST 207H
	T8H	2	C32T8H - 58'-8"	ST 208H
	T10	1	24T10 - 19'-11"	ST 210
BRIDGING				ST 2[illegible]
				ST 210H
				ST 21[illegible]
		5	3" x 2" x [illegible]	ST 403
3/4"		4	3" x 2" x 1/4" x 9'-11"	ST 403
			3" x 2" x 1/4" x 5'-11 1/2"	ST 403
[illegible]			8" x 8" x [illegible]	ST 402
[illegible]		18	3" x 2" x 1/4" x 1'-9"	ST 400
		16	3" x 2" x 1/4" x 1'-3"	ST 400
			9" x 0.135" x 13'-5"	ST 903
[illegible]		16	9" x 0.135" x 15'-2"	ST 953
	C	3	9" x 0.135" x 13'-5"	ST 363
	D	3	9" x 0.135" x 3'-11"	ST 303
ANGLE CLIPS	C1	34	3" x 3" x 1/4" x 1'-0"	ST 400
#8 SHEAR ANCHOR	SA2	9	#8 REBAR x 3'-6"	ST 940
DAMPING SADDLE	DUS-1	2	3/16" x 3/8" x 3'-5"	ST 928
	DUS-2	1	3/16" x 3/8" x 3'-5"	ST 928
CONNECTION BAR	CB1	4	1/4" x 3" x 1'-0"	ST 400
	CB4	8	1/4" x 3" x 1'-10"	ST 400
CONNECTION PLATES	P1	4	3/16" x 2" x 8 1/4"	ST 400
	P2	1	4 1/2" x 3/8" x 0'-3"	ST 400
	P3	1	4 1/2" x 3/8" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x 3/8" x 0'-9"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4" B = 1/4"

TOP VIEW - DETAIL "A"

DETAIL "B1" WHEN APPLICABLE

DETAIL "B" WHEN APPLICABLE

DETAIL "D"

DETAIL "E"

DETAIL "A"

SECTION B-B

TOP VIEW - DETAIL "B"

DETAIL "F"

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

TRUSS 4" x 2" FILLET WELD 223.00 1 1/4" 3" 2" 2 1/2" 3"x2"x1/4" L

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

SECTION A-A

DETAIL "C"

SECTION C-C

NO.	DATE	REVISION	BY

REF. DRWGS.

7-A62-5 & 11	7-22-68
7-A62-72	11-25-68
7-A64-3	10-15-68
A64-15 & 16	7-22-68
7-A64-42	10-15-68
SA 124	10-11-68
7-A1-5	10-15-68
1-E2,3,&4	7-22-66

[illegible] OF NEW YORK [illegible] AUTHORITY

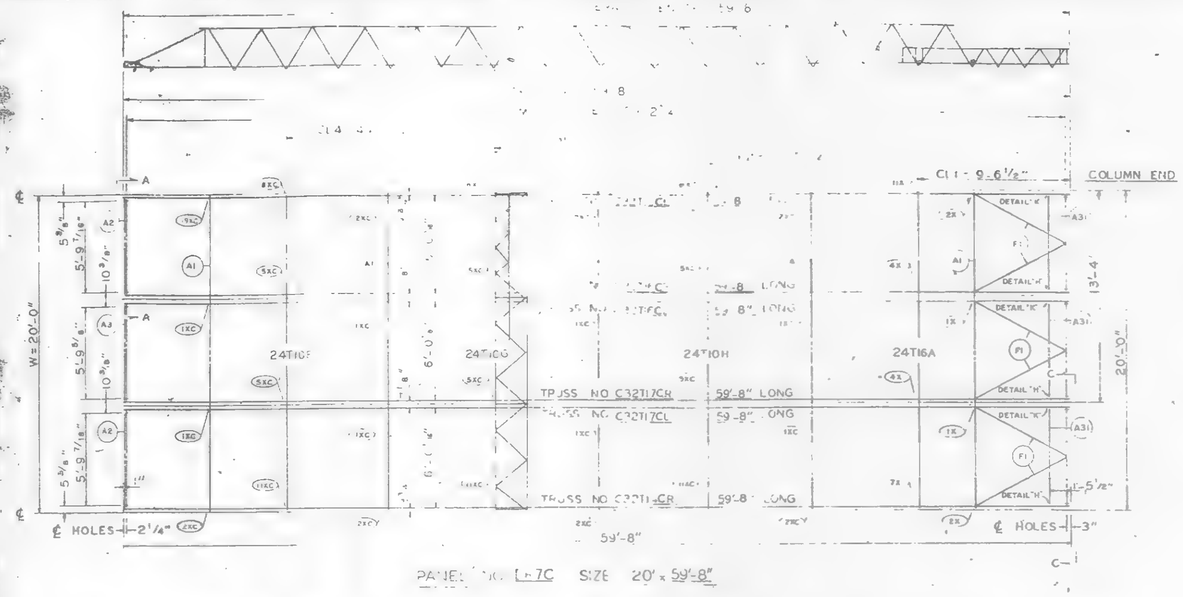
BLDG. A FLOORS 79 & 80 (NORTH)

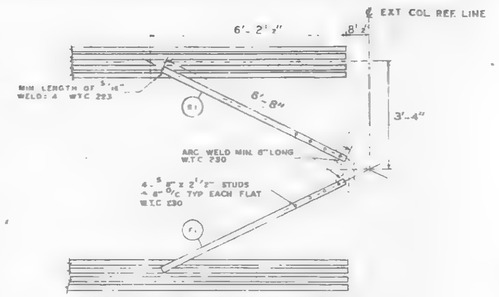
PANEL DR5H- 20' x 58'-8"

BLDG. B FLOORS 79 & 80 (WEST)

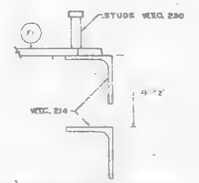
FABRICATION BY ALLEGHENY STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A63-73 4-15-68	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 7/24/69	DRAWN BY PGC DATE JAN. 14, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JAN. 14, 1969	IN CHARGE OF PROD. REV.
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP DR5H





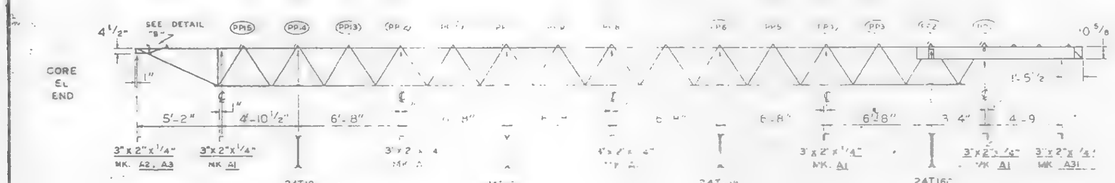
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER-DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG.
FLOOR TRUSSES	T14CR	1	C32T14CR x 59'-8"	ST 214CL
	T15CL	1	C32T15CL x 59'-8"	ST 215CL
	T16CL	1	C32T16CL x 59'-8"	ST 216CL
	T16CR	1	C32T16CR x 59'-8"	ST 216CL
	T17CL	1	C32T17CL x 59'-8"	ST 217CL
	T17CR	1	C32T17CR x 59'-8"	ST 217CL
BRIDGING TRUSSES	T16F	1	24T16F x 19'-11"	BT 216F
	T16G	1	24T16G x 19'-11"	BT 216G
	T16H	1	24T16H x 19'-11"	BT 216H
	T16EA	1	24T16EA x 19'-11"	BT 216A
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF1	3	3"x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	11 1/2" x 5/16" x 5'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4"x 0'-9"	ST 400
	PP2	18	3"x 3/8"x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135"x 15'-2"	ST 303
	C	3	9"x .0135"x 13'-2 1/2"	ST 303
	D	3	9"x .0135"x 2'-1"	ST 303
	J	3	9"x .0135"x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	24	2"x 1" 2"x .25"x 6"	ST 400
#8 SHEAR ANCHOR	SA2	5	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" D x 1'-3"	ST 400
	CB4	6	1" ℄ x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2"x 3 1/8"x 0'-6 1/2"	ST 400
	P2	1	4 1/2"x .39"x 0'-9"	ST 400
	P4	3	8 1/2"x 1/2"x 0'-8"	ST 400
	P8	1	4 1/2"x .39"x 0'-9"	ST 401
	P9	6	3"x 1/2"x 1'-2"	ST 409

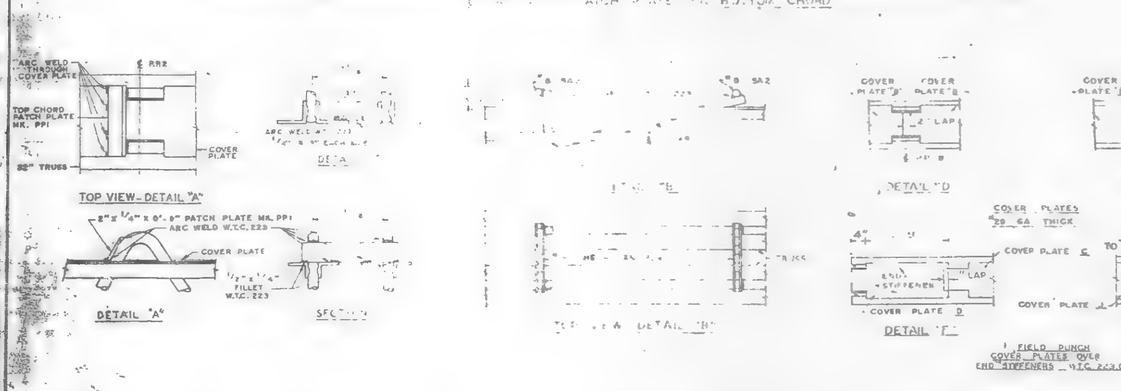
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (K)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 4" FULL THROAT FILLET.

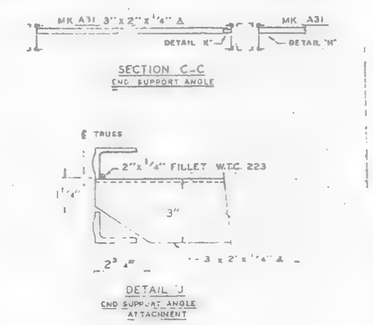


NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-31	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
SB-124	3-24-68



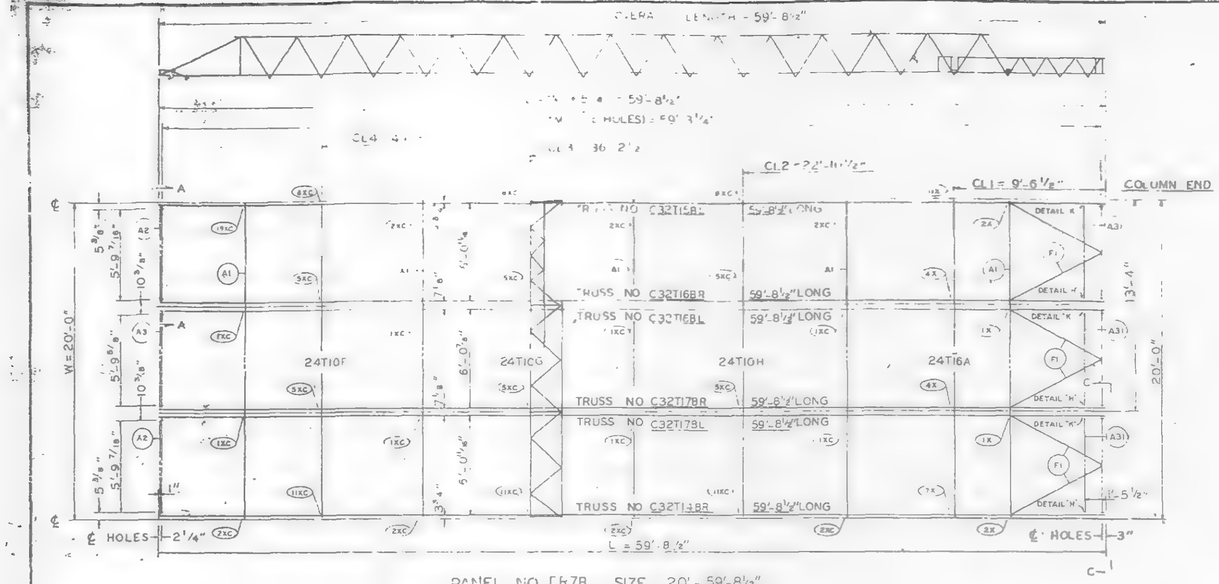


FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

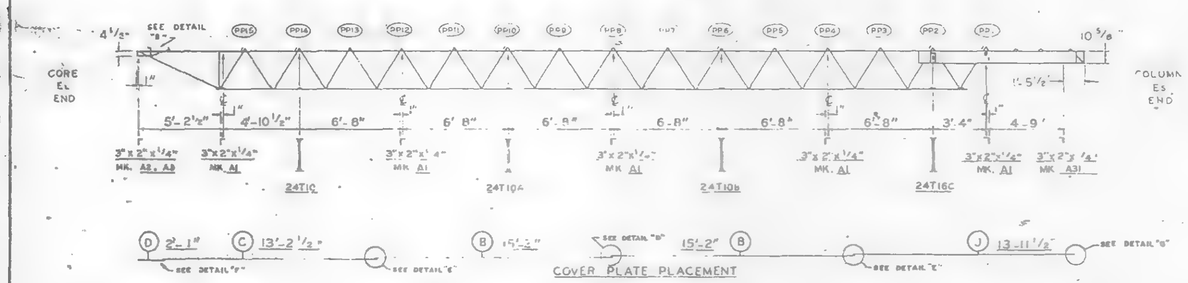
BLDG. B FLOORS 59 & 92 (EAST)

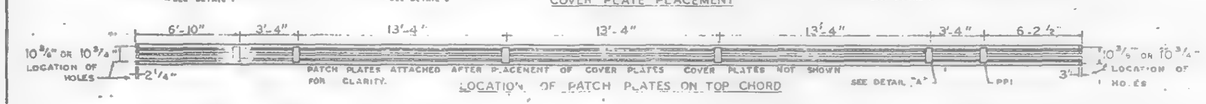
PANEL DR7C - 20' x 59'-8"

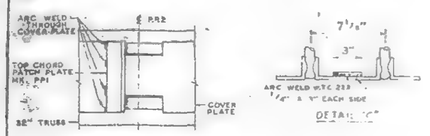
FABRICATION BY	DACLEDE STEEL COMPANY		
FABRICATE AT	MADISON, ILLINOIS	DESIGN DRAWING NO	7-AB3-31 PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE 6/16/69	DRAWN BY	DATE MAY 8, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA	DATE MAY 8, 1969 IN CHARGE OF PROD. DEV
DETAILED		FABRICATION CONT NO W.T.C. 221	SHEET NO FP DR7C

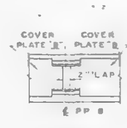


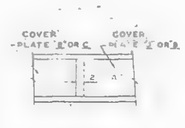
PANEL NO. CH7B SIZE 20' x 59'-8½"

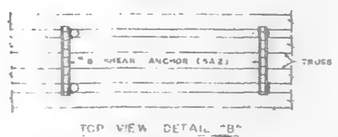


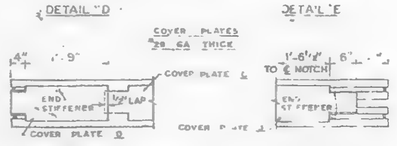


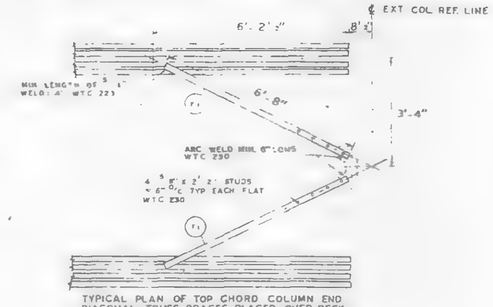




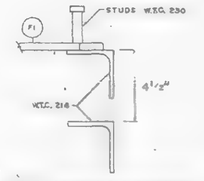








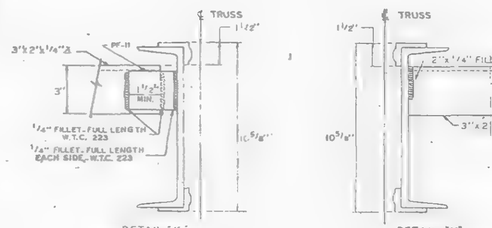
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



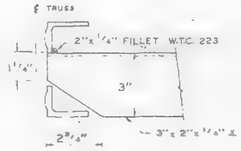
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG.
FLOOR TRUSSES	T15A	1	C32T15A x 59'-8 ½"	ST 2148L
	T15B	1	C32T15B x 59'-8 ½"	ST 2158L
	T16A	1	C32T16A x 59'-8 ½"	ST 2168L
	T16B	1	C32T16B x 59'-8 ½"	ST 2175L
	T17A	1	C32T17A x 59'-8 ½"	ST 2175L
BRIDGING TRUSSES	10F	1	24T10F x 19'-11"	BT 210F
	10G	1	24T10G x 19'-11"	BT 210G
	10H	1	24T10H x 19'-11"	BT 210H
	16A	1	24T16A x 19'-11"	BT 216A
3"x 2"x ⅛" ANGLE	A	5	3"x 2"x 1'-4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1'-4"x5'-11⅝"	ST 403
	A3	1	3"x 2"x 1'-4"x5'-11¾"	ST 403
	A31	3	3"x 2"x 1'-4"x5'-8½"	ST 410
CLOSURE PLATES	PP11	3	3" x ¼" x 0'-2⅜"	ST 412
DIAGONAL FLATS	F1	6	1'-4" x ⅜" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ⅜" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2⅛"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11⅛"	ST 304
ANGLE CLIPS	C1	24	2" x 1' 2" x 2.25" x 6"	ST 400
⅞ SHEAR ANCHOR	SA2	6	⅞ REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" Ø x 1'-3"	ST 400
	CB4	6	1" Ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3½" x 3" x 8" x 0'-8½"	ST 400
	P2	1	4½" x .39" x 0'-9"	ST 400
	P4	3	6½" x 1' 2" x 0'-8"	ST 400
	P6	1	4½" x .39" x 0'-9"	ST 401
	P9	6	3" x ½" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1X)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" x 4" FULL THROAT FILLET.



SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY

REF. DRWG.

7-AB3-31	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
SB-124	3-24-69

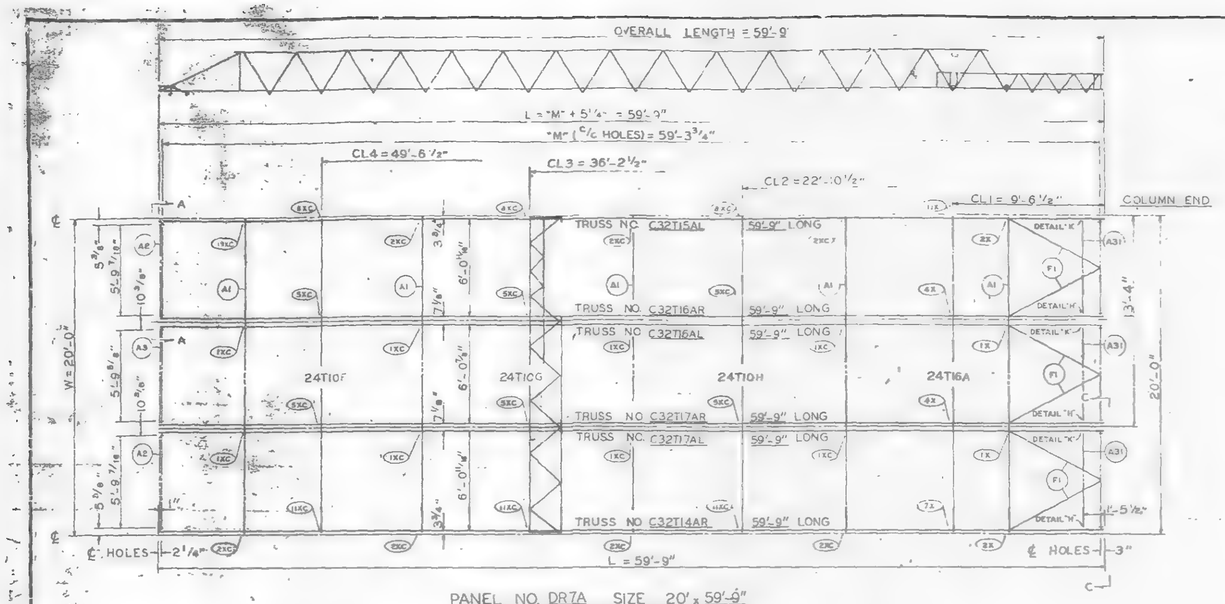
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. B FLOORS 92 (WEST)

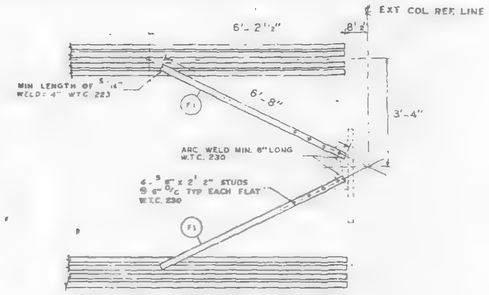
PANEL No. CH7B - 20' x 59'-8½"

FABRICATION BY LACLEDE STEEL COMPANY

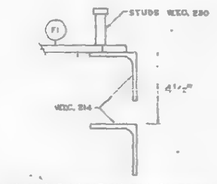
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 7-AB3-31 PLATE
APPROVED FOR FABRICATION [illegible] TOP PANEL A — DATE 6/6/69
DRAWN BY [illegible] DATE MAY 6, 1969
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR — DATE
CHECKED BY I.M. CHURA DATE MAY 8, 1969 — IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER
FABRICATION CONT. NO W.T.C. 221
SHEET NO. FD CH7B



PANEL NO. DR7A SIZE 20' x 59'-9"



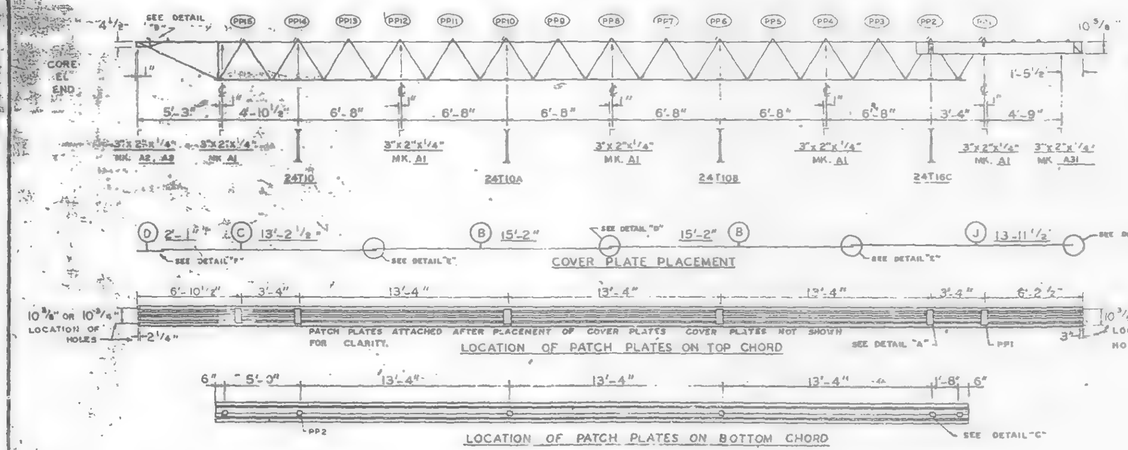
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

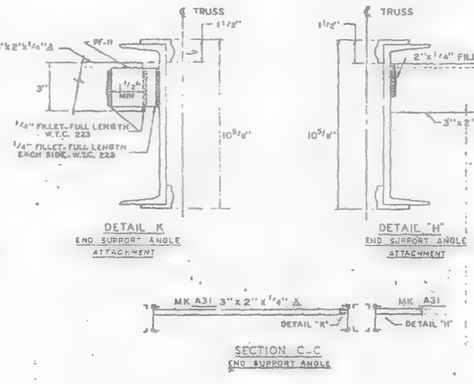


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

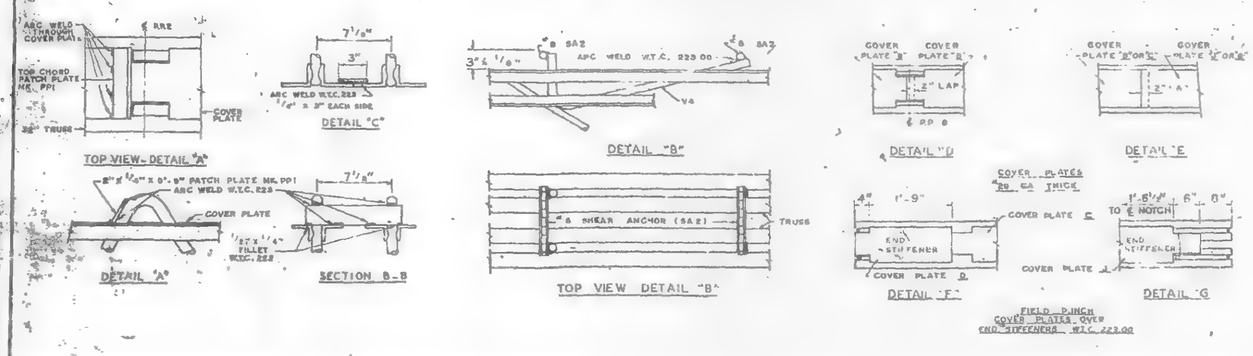
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AR	1	C32T14AR x 59'-9"	ST 214AL
	T15AL	1	C32T15AL x 59'-9"	ST 215AL
	T16AL	1	C32T16AL x 59'-9"	ST 216AL
	T16AR	1	C32T16AR x 59'-9"	ST 216AL
	T17AL	1	C32T17AL x 59'-9"	ST 217AL
	T17AR	1	C32T17AR x 59'-9"	ST 217AL
BRIDGING TRUSSES	T10F	1	24T10F x 19'-11"	ST 210F
	T10G	1	24T10G x 19'-11"	ST 210G
	T10H	1	24T10H x 19'-11"	ST 210H
	T16A	1	24T16A x 19'-11"	ST 216A
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4" x 5'-11 3/4"	ST 403
	A3	1	3"x 2"x 1/4" x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4" x 5'-8 1/4"	ST 410
CLOSURE PLATES	PP11	3	3" x 1/4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	6	11" x 5'-8" x 5/8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	24	2" x 1" 2" x .238" x 6"	ST 400
ø 8 SHEAR ANCHOR	SA2	6	ø 8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
	CB4	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3'-3" x 3 1/2" x 0'-8 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	8 1/2" x 3 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
	P9	8	3" x 1/2" x 1'-2"	ST 408

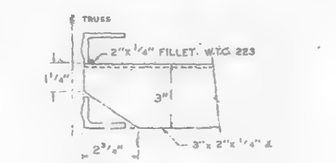
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (1K)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.

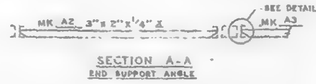




SECTION C-C
END SUPPORT ANGLE







NO.	DATE	REVISION	BY

REF DRWG.

7-A83-31	10-4-68
7-A84-28	7-22-68
7-A81-13	10-4-68
7-A81-14, 15 & 16	10-4-68
7-A82-13	10-4-68
7-A82-17	10-4-68
SB-124	3-24-69

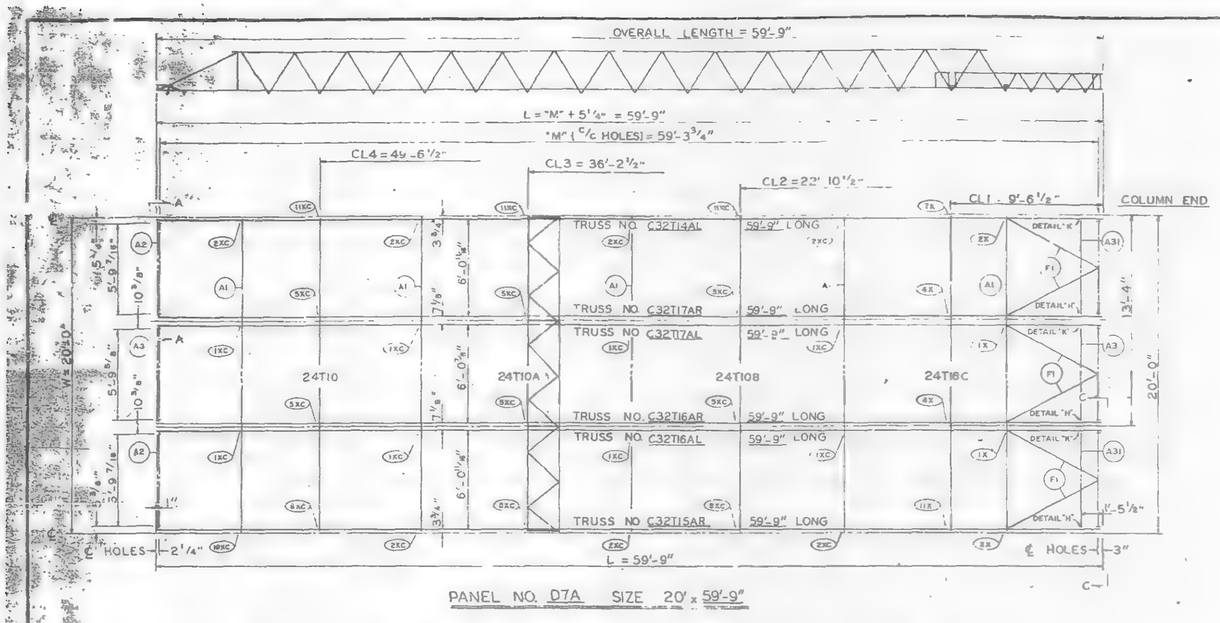
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER · N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

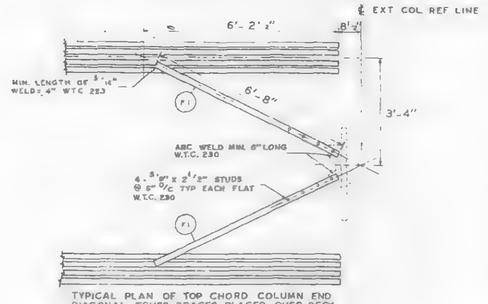
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

PANEL DR7A - 20' x 59'-9"

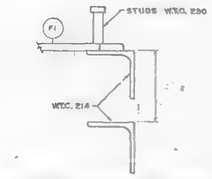
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-31	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 6/6/69	DRAWN BY [illegible] DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE	CHECKED BY T.M. CHUBA DATE MAY 8, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP DR7A





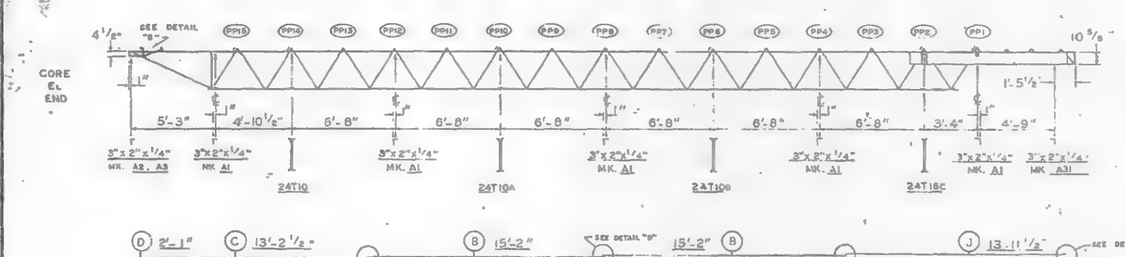
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



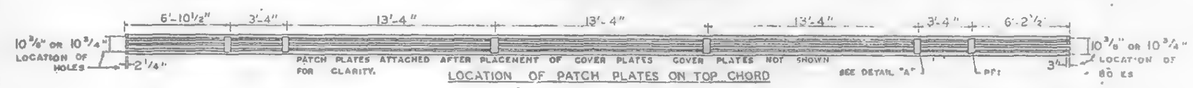
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AL	1	C32T14AL x 59'-9"	ST 214AL
	T15AR	1	C32T15AR x 59'-9"	ST 215AL
	T16AL	1	C32T16AL x 59'-9"	ST 216AL
	T17AR	1	C32T17AR x 59'-9"	ST 217AL
	T17AL	1	C32T17AL x 59'-9"	ST 217AL
BRIDGING TRUSSES	T10	1	24T10 x 19'-11"	BT 210
	T10A	1	24T10A x 19'-11"	BT 210A
	T10B	1	24T10B x 19'-11"	BT 210B
	T16C	1	24T16C x 19'-11"	BT 216C
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-1"	ST 403
	A2	2	3" x 2" x 1/4" x 5'-11 3/16"	ST 403
	A3	1	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A31	3	3" x 2" x 1/4" x 5'-9 1/8"	ST 410
CLOSURE PLATES	PP11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	11" x 5" x 6'-8"	ST 402
PATCH PLATES	PP1	8	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/4"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	24	2" x 1" x 1/4" x .25" x 6"	ST 400
3/4" ℄ SHEAR ANCHOR	SA2	6	3/4" ℄ REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" x 0'-3"	ST 400
	CB4	6	1" ℄ x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3 7/8" x 0'-6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .39" x 0'-9"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

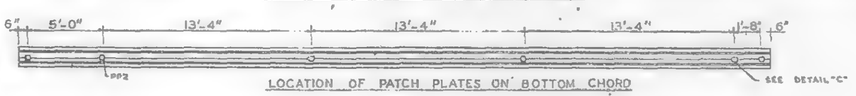
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS; ie. (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.



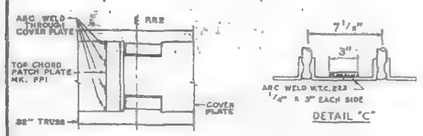
COVER PLATE PLACEMENT



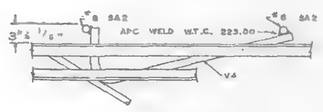
LOCATION OF PATCH PLATES ON TOP CHORD



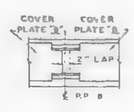
LOCATION OF PATCH PLATES ON BOTTOM CHORD



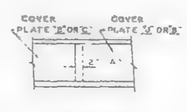
DETAIL "C"



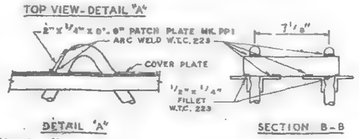
DETAIL "B"



DETAIL "D"

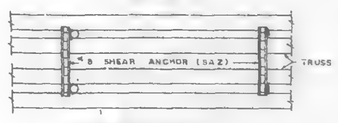


DETAIL "E"

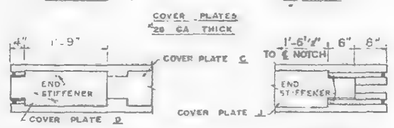


DETAIL "A"

SECTION B-B



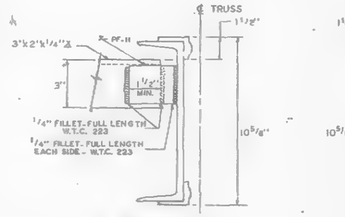
TOP VIEW DETAIL "B"



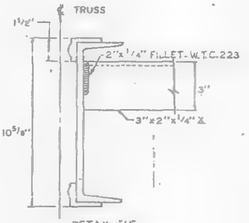
DETAIL "F"

DETAIL "G"

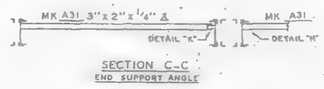
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 224.00



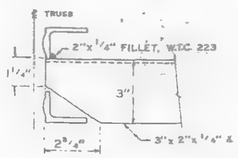
DETAIL "K"
END SUPPORT ANGLE ATTACHMENT



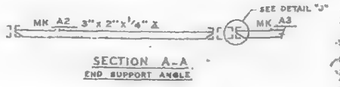
DETAIL "H"
END SUPPORT ANGLE ATTACHMENT



SECTION C-C
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY

REF DRWG.

7-A83-30	10-4-68
7-A84-28	7-22-68
7-A81-13	10-4-68
7-A81-14, 15 & 16	10-4-68
7-A82-13	10-4-68
7-A82-17	10-4-68
SB-124	3-24-69

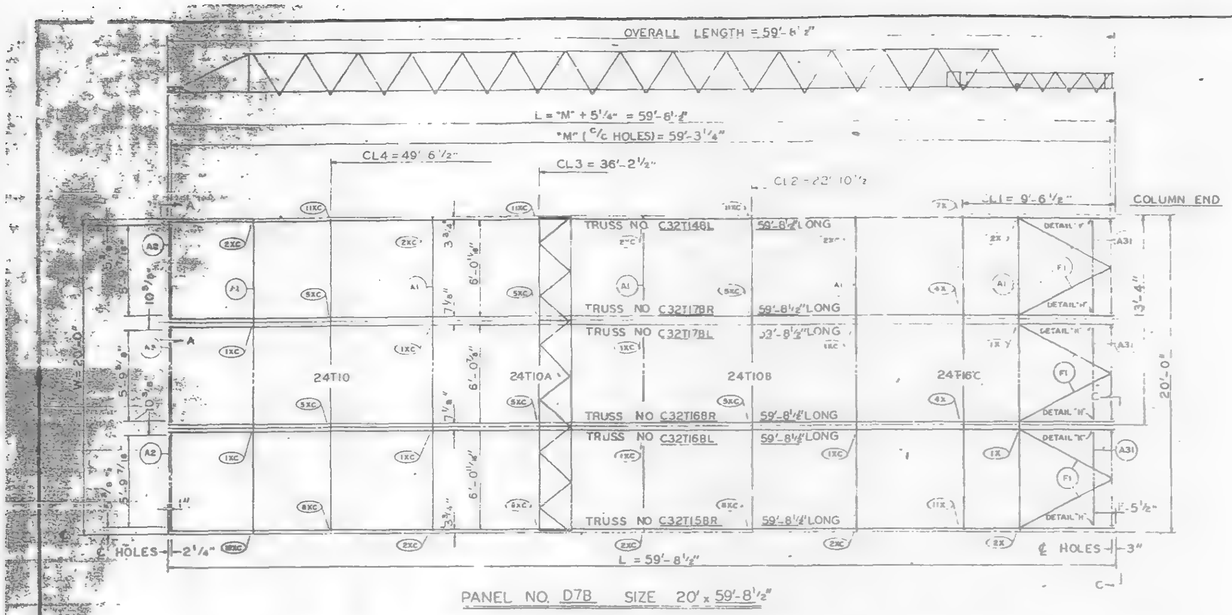
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

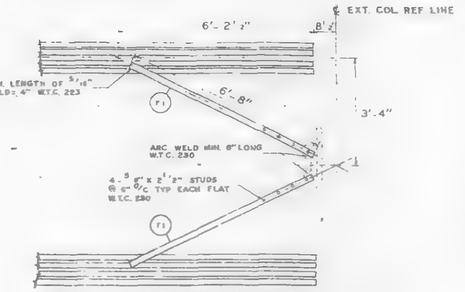
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

PANEL D7A - 20' x 59'-9"

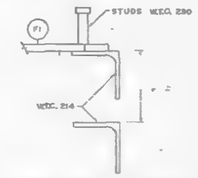
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-30	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A.	DATE 6/6/69	DRAWN BY [illegible] DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR ARCHITECTS	DATE	CHECKED BY T.M. CHUBA DATE MAY 8, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP D7A

LACLEDE STEEL CO.





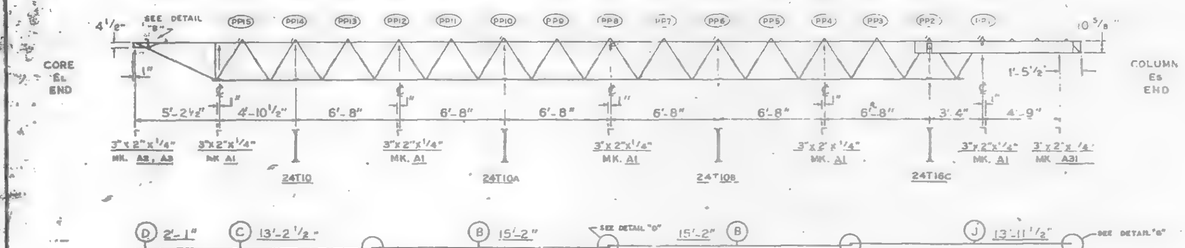
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

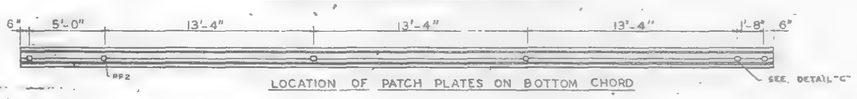


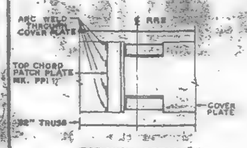
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

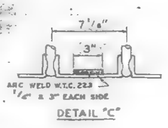
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T146L	1	C32T146L x 59'-8 1/2"	ST 214BL
	T178R	1	C32T158R x 59'-8 1/2"	ST 215BL
	T168L	1	C32T168L x 59'-8 1/2"	ST 216BL
	T168A	1	C32T168A x 59'-8 1/2"	ST 217BL
	T178L	1	C32T178A x 59'-8 1/2"	ST 217BL
BRIDGING TRUSSES	T10	1	24T10 x 19'-11"	BT 210
	T10A	1	24T10A x 19'-11"	BT 210A
	T10B	1	24T10B x 19'-11"	BT 210B
	T16C	1	24T16C x 19'-11"	BT 216C
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 5'-11 3/16"	ST 403
	A3	1	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A31	3	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	CP1	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	8	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x 0.35" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .035" x 13'-11 1/3"	ST 304
ANGLE CLIPS	C1	24	2" x 1 1/2" x .25" x 6"	ST 400
3/4" ø SHEAR ANCHOR	SA2	6	3/4" ø REBAR x 0'-9"	ST 400
	SA1	5	1" ø x 1'-3"	ST 400
CONNECTION BAR	CB4	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3'-4" x 0'-6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .39" x 0'-9"	ST 401
	P9	6	3" x 1 1/2" x 1'-2"	ST 409

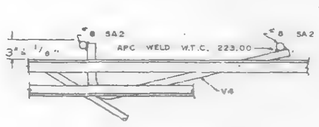
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (L).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

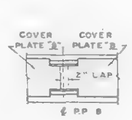


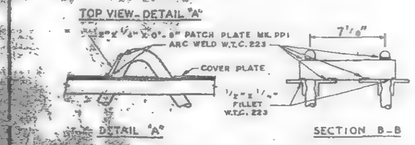


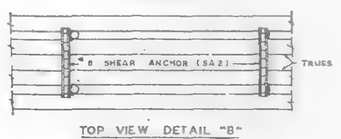


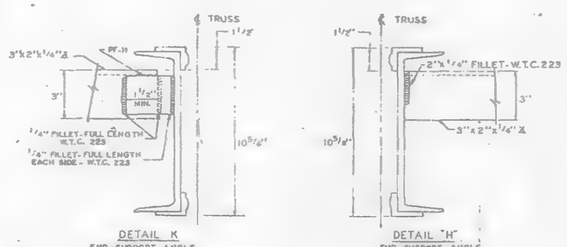


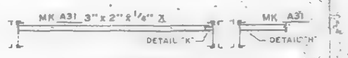


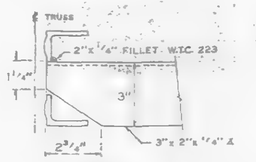


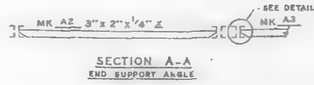












NO.	DATE	REVISION	BY

REF. DRWG.

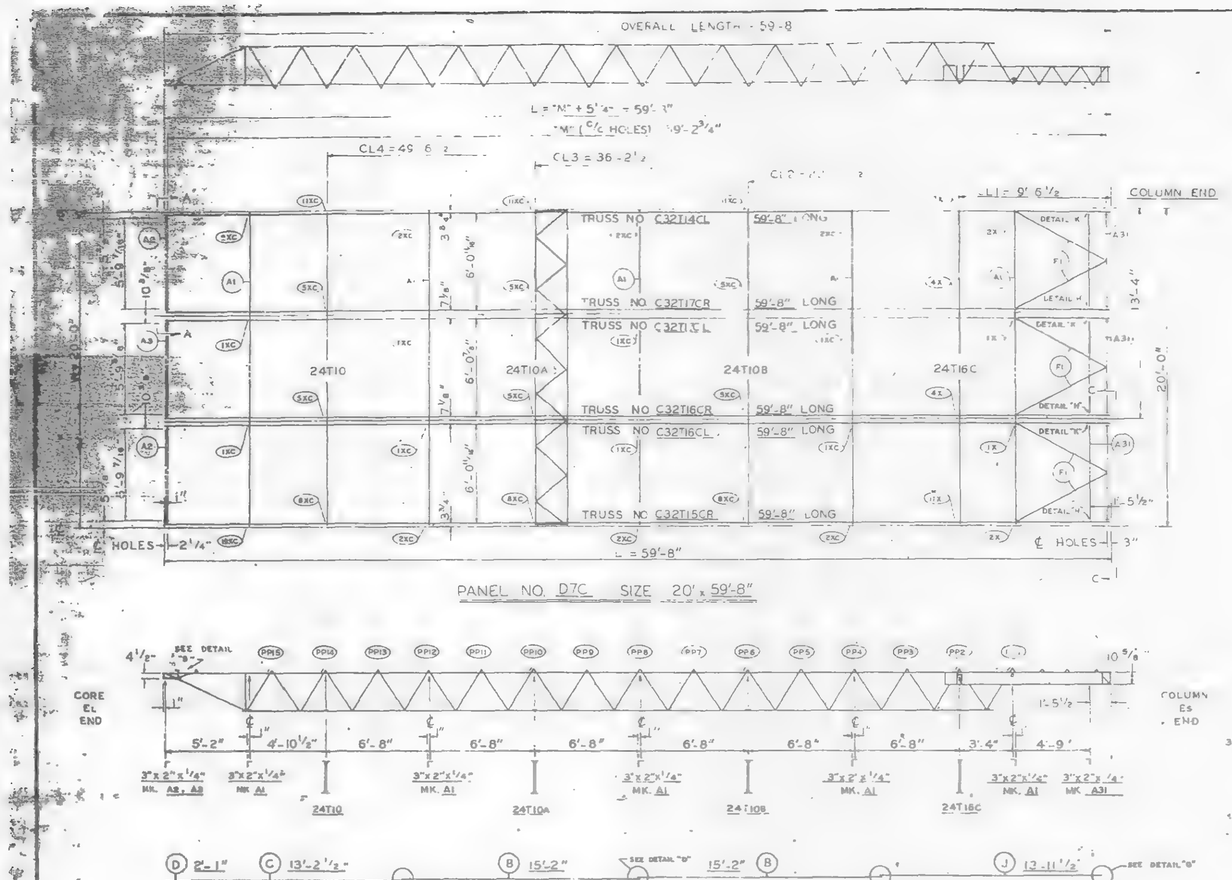
7-A83-30	10-4-68
7-A84-28	7-22-68
7-A81-13	10-4-68
7-A81-14, 15 & 16	10-4-68
7-A82-13	10-4-68
7-A82-17	10-4-68
SS-124	3-24-69

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 8 FLOORS 92 (WEST)

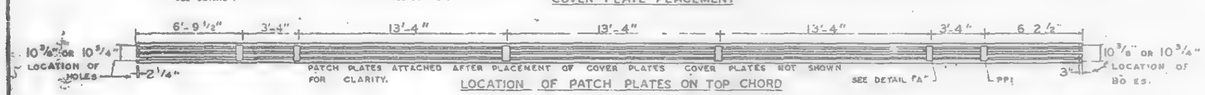
PANEL D7B - 20' x 59'-8 1/2"

FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY [illegible] FOR PO NYA DATE 6/6/69
APPROVED FOR FABRICATION BY [illegible] DATE
DETAILED BY R.C. WEBER
DESIGN DRAWING NO 7-A83-30 PLATE
DRAWN BY [illegible] DATE MAY 8, 1969
CHECKED BY TM CHURA DATE MAY 8, 1969
IN CHARGE OF PROD. DEV.
FABRICATION CONT NO W.T.C. 221
SHEET NO FP D7B

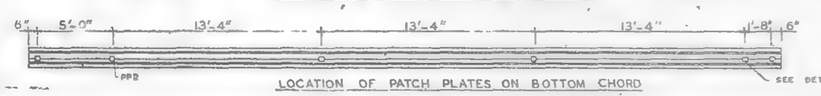


PANEL NO. D7C SIZE 20' x 59'-8"

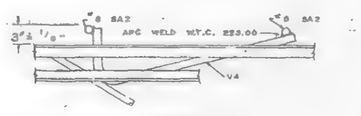
COVER PLATE PLACEMENT



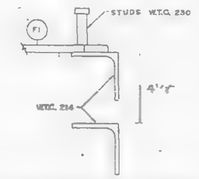
LOCATION OF PATCH PLATES ON TOP CHORD



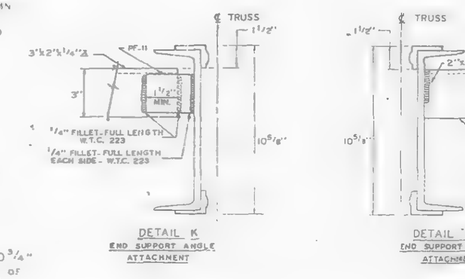
LOCATION OF PATCH PLATES ON BOTTOM CHORD



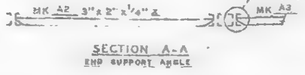
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



SECTION C-C
END SUPPORT ANGLE



SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	QTY	SIZE	
FLOOR TRUSSES	T14BL	1	C32T14BL x 59'-8"	ST 2148L
	T15BR	1	C32T15BR x 59'-8"	ST 2158L
	T15BL	1	C32T15BL x 59'-8"	ST 2158L
	T16BR	1	C32T16BR x 59'-8"	ST 2168L
	T17BL	1	C32T17BL x 59'-8"	ST 2178L
	T17BR	1	C32T17BR x 59'-8"	ST 2178L
BRIDGING TRUSSES	T1L	1	24T10 x 19'-11"	BT 210
	T10A	1	24T10A x 19'-11"	BT 210A
	T10B	1	24T10B x 19'-11"	BT 210B
	T16C	1	24T16C x 19'-11"	BT 216C
3"x 2"x' 4" ANGLE	∠1	5	3"x 2"x' 4" x 19'-11"	ST 403
	∠2	2	3"x 2"x' 4" x 5'-11 13/16"	ST 403
	∠3	1	3"x 2"x' 4" x 5'-11 3/4"	ST 403
	∠3	3	3"x 2"x' 4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PL	3	3" x 4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	6	1' x 5 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2 x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	24	2" x 1' 2" x .25" x 6"	ST 400
8 SHEAR ANCHOR	SA2	8	8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	" 0 x 1'- 3"	ST 400
	CB4	6	1" 0 x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3 8" x 0'-6 1/8"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1' 1/2" x 0'-8"	ST 400
	P5	1	4 1/2" x .39" x 0'-0"	S1 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (1K).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

NO	DATE	REVISION	BY

REF DRWG.

7-AB3-30	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
SE-124	3-24-69

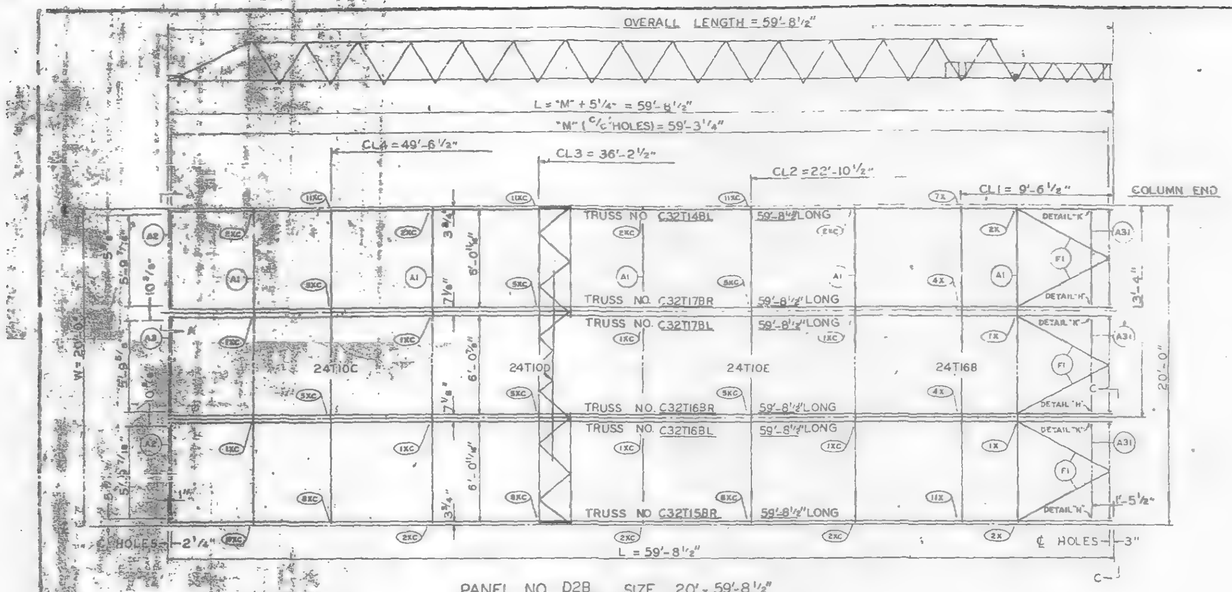
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. 8 FLOORS 59 & 92 (EAST)

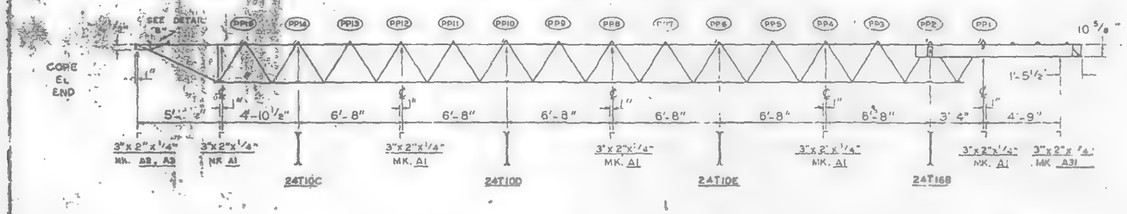
PANEL D7C - 20'-x 59'-8"

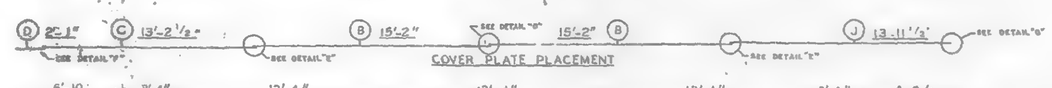
FABRICATION BY LACLEDE STEEL COMPANY

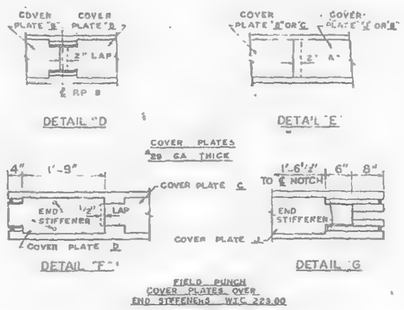
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-30	PLATE
APPROVED FOR FABRICATION BY FOR PONYA	DATE 6/6/69	DRAWN BY EWR DATE MAY 8, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY J.M. CHURA DATE MAY 8, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP D7C

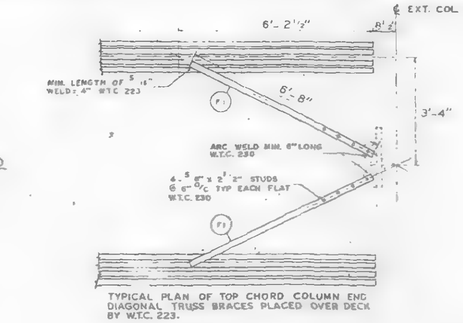


PANEL NO. D2B SIZE 20' x 59'-8 1/2"



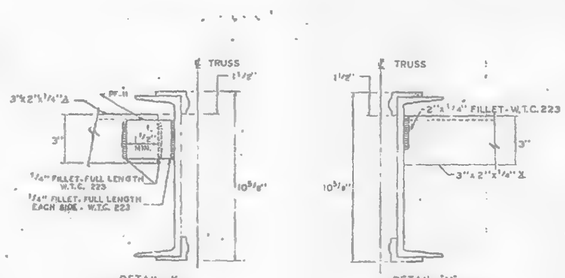


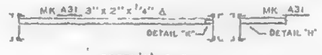


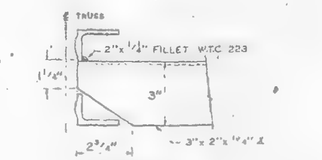


REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BL	1	C32T14BL x 59'-8 1/2"	ST 214BL
	T15BR	1	C32T15BR x 59'-8 1/2"	ST 215BL
	T16BL	1	C32T16BL x 59'-8 1/2"	ST 216BL
	T17BR	1	C32T17BR x 59'-8 1/2"	ST 217BL
	T17BL	1	C32T17BL x 59'-8 1/2"	ST 217BL
BRIDGING TRUSSES	T11OC	1	24T11OC x 19'-11"	ST 210C
	T10D	1	24T10D x 19'-11"	ST 210D
	T10E	1	24T10E x 19'-11"	ST 210E
	T16B	1	24T16B x 19'-11"	ST 216B
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4" x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4" x 5'-11 7/16"	ST 403
	A31	3	3"x 2"x 1/4" x 5'-8 7/8"	ST 416
CLOSURE PLATES	PF11	3	3" x 1/4" x 0'-2 5/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/16" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	24	2" x 1 1/2" x .25" x 6"	ST 400
"8 SHEAR ANCHOR	SA2	6	"8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" Ø x 1'-3"	ST 400
	CB4	8	1" Ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (A).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.







NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-30	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
SA-124	10-11-68

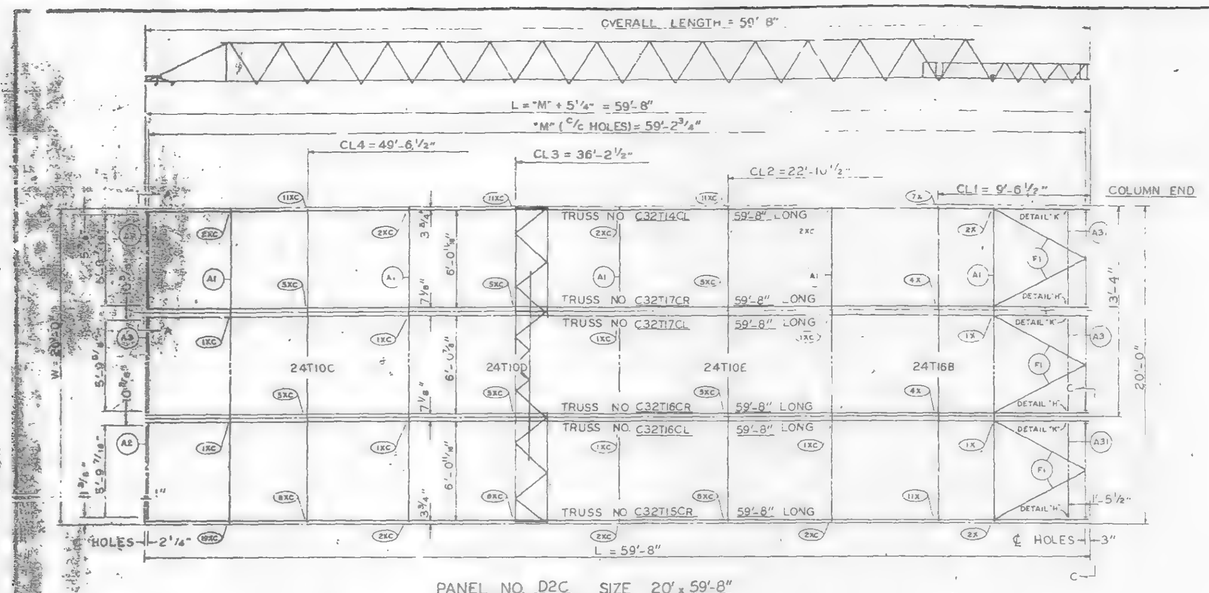
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)

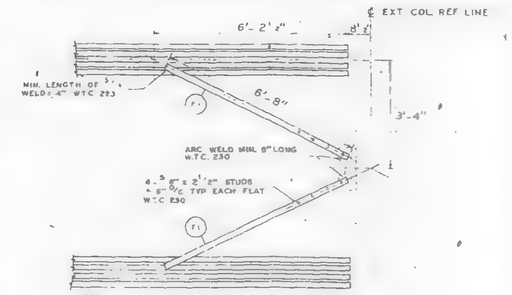
PANEL D2B - 20' x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY

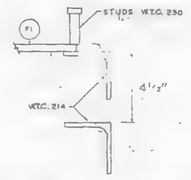
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-30	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 6/6/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY I.N. CHUNA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO.		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP D2B



PANEL NO. D2C SIZE 20' x 59'-8"



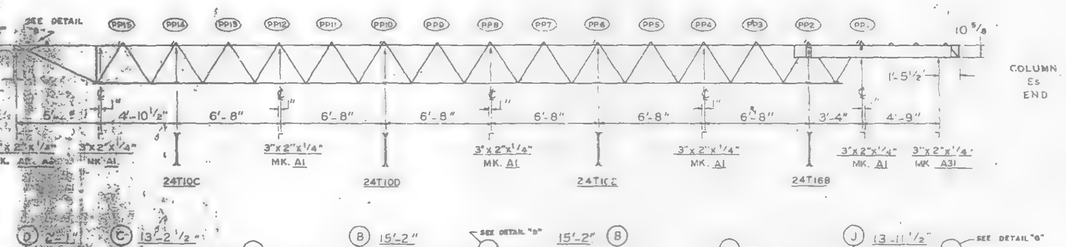
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

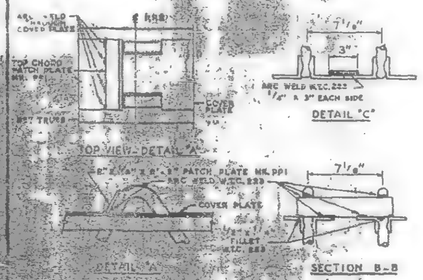


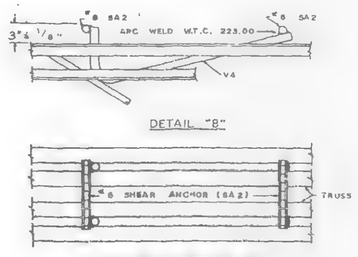
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

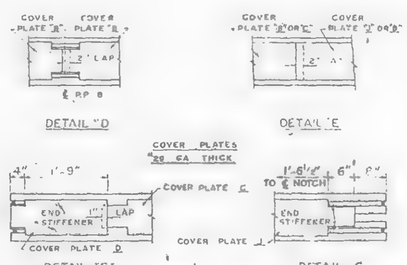
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG
FLOOR TRUSSES	T14CL	1	C32T14CL x 59'-8"	ST 214CL
	T15CR	1	C32T15CR x 59'-8"	ST 215CL
	T17CL	1	C32T17CL x 59'-8"	ST 218CL
	T17CR	1	C32T17CR x 59'-8"	ST 217CL
	T16CL	1	C32T16CL x 59'-8"	
	T16CR	1	C32T16CR x 59'-8"	
BRIDGING TRUSSES	T10C	1	24T10C x 19'-11"	ST 210C
	T10D	1	24T10D x 19'-11"	ST 210D
	T10E	1	24T10E x 13'-11"	ST 210E
	T16B	1	24T16B x 19'-11"	ST 216B
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 5'-11 9/16"	ST 403
	A3	1	3" x 2" x 1/4" x 5'-8 3/4"	ST 403
	A31	3	3" x 2" x 1/4" x 5'-8 1/16"	ST 410
CLOSURE PLATES	PP-11	3	1" x 1 1/4" x 0'-2 3/16"	ST 412
DIAGONAL FLATS	F1	6	11'-2" x 3" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
ANGLE CLIPS	C1	24	2" x 1' 2" x .25" x 8"	ST 400
3/8 SHEAR ANCHOR	SA2	6	3/8 REBAR x 0'-9"	ST 400
	CB1	5	1" ø x 1'-3"	ST 400
CONNECTION BAR	CB4	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/4" x 0'-6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-8"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

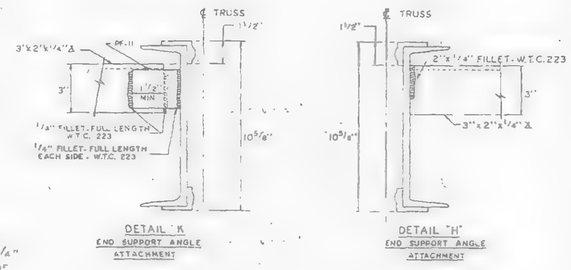
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS (e.g. (A2)).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

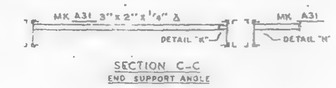




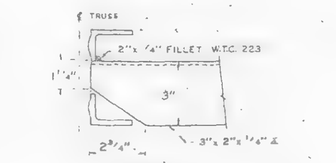








SECTION C-C
END SUPPORT ANGLE



SECTION A-A
END SUPPORT ANGLE

NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-30	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
SA-124	10-11-68

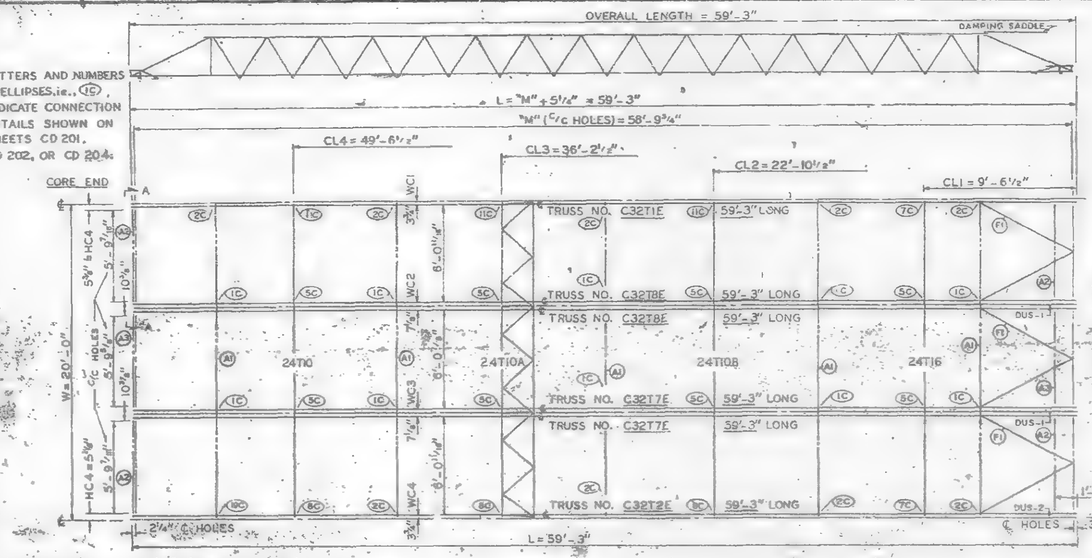
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 5C (SOUTH)

PANEL D2C - 20' x 59'-8"

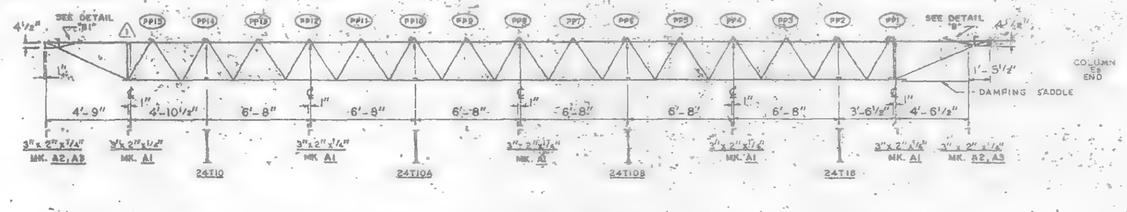
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO 7-AB3-30
PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA DATE 6/6/69
DRAWN BY [illegible] DATE APRIL 28, 1969
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE
CHECKED BY I.M. CHUBA DATE APRIL 28, 1969
IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO.
DETAILED BY A.C. WEBER
FABRICATION CONT NO W.T.C. 221
SHEET NO FP D2C

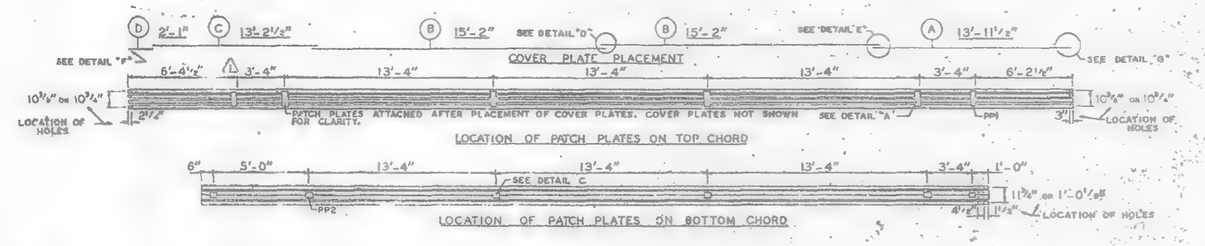
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

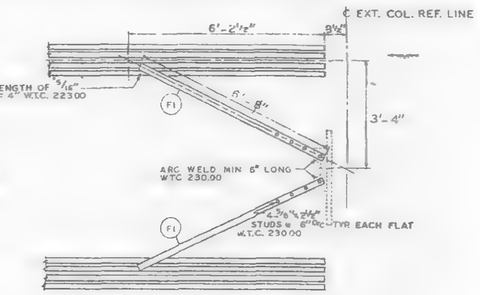


℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

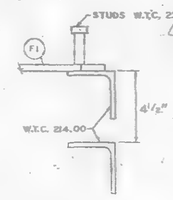
PANEL NO. DIE SIZE 20' x 59'-3"







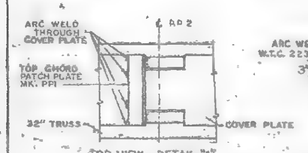
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



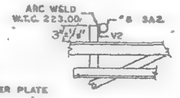
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T1E	1	C32T1E - 59'-3"	ST 201E
	T2E	1	C32T2E - 59'-3"	ST 202E
	T7E	2	C32T7E - 59'-3"	ST 203E
	T8E	2	C32T8E - 59'-3"	ST 208E
BRIDGING TRUSSES	T10	1	24T10 - 19'-11"	BT 210
	T10A	1	24T10A - 19'-11"	BT 210A
	T10B	1	24T10B - 19'-11"	BT 210B
	T16	1	24T16 - 19'-11"	BT 216
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 5/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 5/8"	ST 403
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	10" x .0135" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
#8 SHEAR ANCHOR	SA2	9	# 8 REBAR x 0'-9"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 5/16" x 3'-0 3/4"	ST 298
	DUS-2	1	3 1/2" x 3 1/2" x 5/16" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	4	1" ϕ x 1'-3"	ST 400
	CB4	8	1" ϕ x 0'-10"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3 1/16" x 6 1/2"	ST 400
	P2	1	4 1/2" x .30" x 0'-9"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P8	1	4 1/2" x .30" x 0'-9"	ST 401

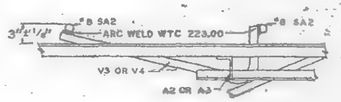
NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET



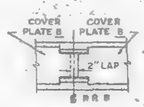
TOP VIEW - DETAIL "A"



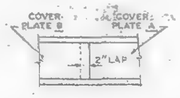
DETAIL "B1" WHEN APPLICABLE



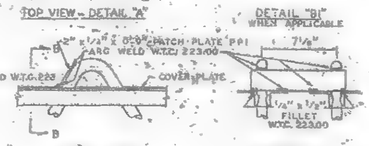
DETAIL "B" WHEN APPLICABLE



DETAIL "D"

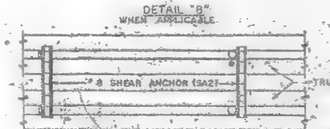


DETAIL "E"

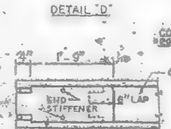


DETAIL "A"

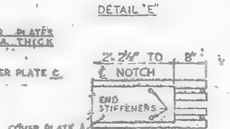
SECTION B-B



TOP VIEW - DETAIL "B"

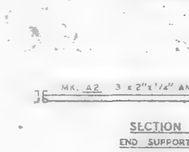


DETAIL "C"

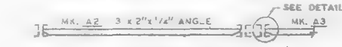


DETAIL "G"

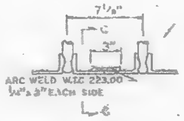
FIELD PUNCH COVER PLATES OVER END STIFFENERS W/C 223.00



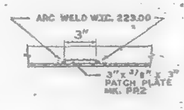
DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

NO.	DATE	REVISION	BY
1	8-9-68	AS NOTED	G.D.C

REF. DRWGS.
7-AB2-3 & 11 — 7-22-68
7-AB3-9 — 10-15-68
7-AB4-3,1 — 1-3-68
7-AB4-15 & 16, 38 & — 7-22-68
7-AB4-J, 3 & 42 — 8-15-68
SB-124 — 1-6-69
7-AB1-2, 3 & 4 — 7-22-68
7-AB1-8, 4 & 5 — 10-15-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)

PANEL DIE - 20' x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-09 | PLATE

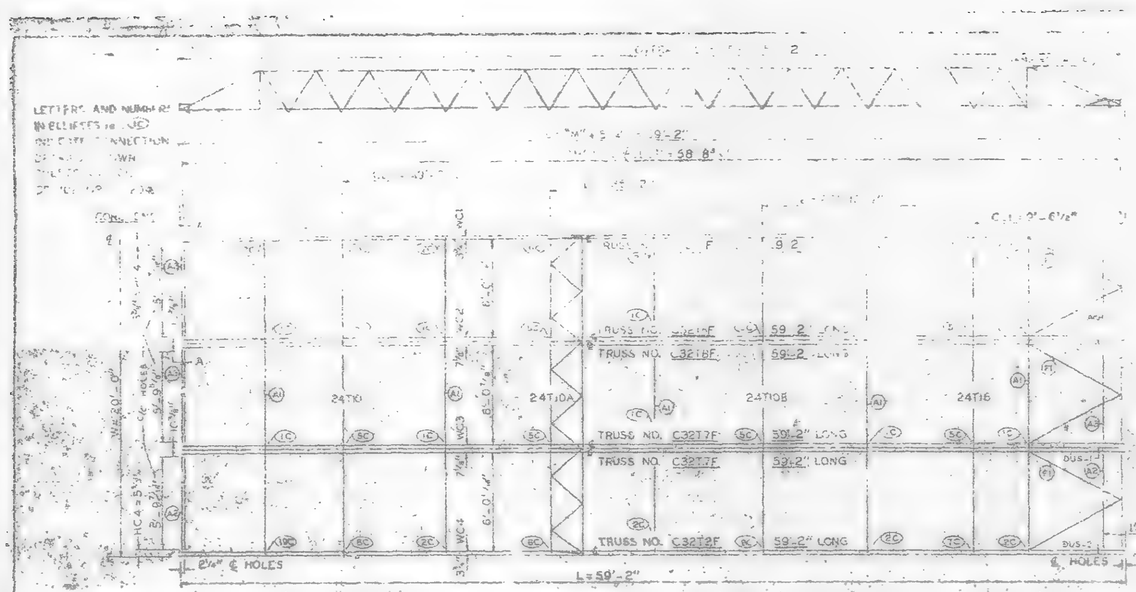
APPROVED FOR FABRICATION BY [illegible] FOR PORTY A. | DATE 7-7-69

DRAWN BY GDC DATE JULY 22, 1968

APPROVED FOR FABRICATION BY FOR FABRICATOR | DATE

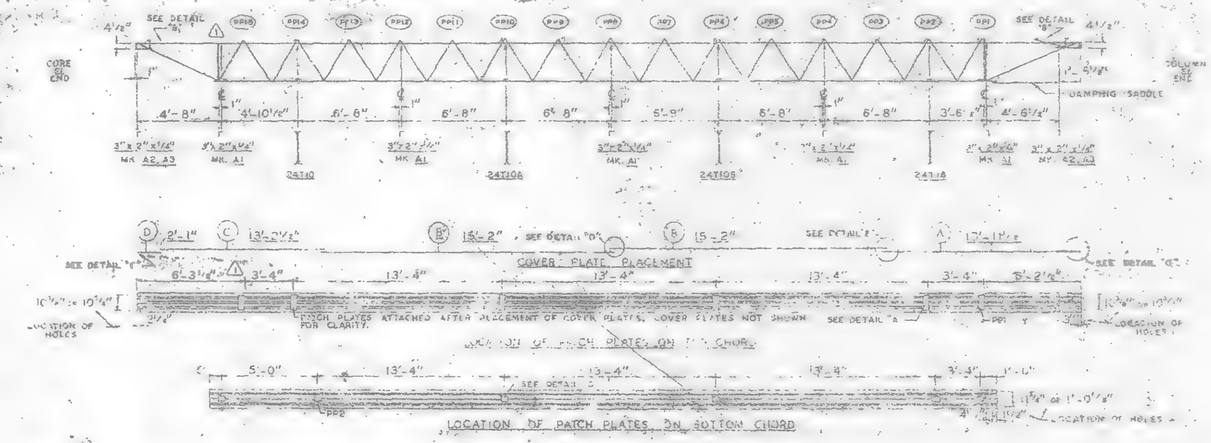
CHECKED BY T.M.CHURA DATE JULY 22, 1968 | IN CHARGE OF PROD. DEV.

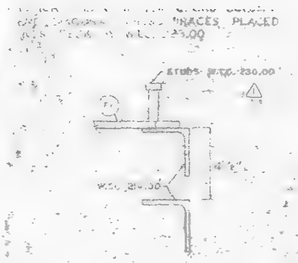
DETAILED BY [illegible] | FABRICATION CONT. NO. W.T.C. 221 | SHEET NO. ST PANEL DIE



℄ & DIMENSION HC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.

PANEL NO. DIF SIZE 20' x 59'-2"





CLIP ANGLE LOCATION FOR DIAGONAL BLATS. 4'-6" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

	F	1	23"TYP	201F
	F1	1	23"TYP	ST 202F
	F2	2	23"TYP	ST 207F
	F3	2	23"TYP	ST 208F
	A1	1	47"	ST 210
	A1A	1	47"	ST 210A
	A1B	1	47"	ST 210B
	A2	1	47"	ST 215
	A3	4	3"x 3"x 1/4" x 1'-0"	ST 403
	A4	4	3"x 3"x 1/4" x 1'-3"	ST 403
	A5	4	3"x 3"x 1/4" x 1'-6"	ST 403
	A6	4	3"x 3"x 1/4" x 1'-9"	ST 403
	A7	4	3"x 3"x 1/4" x 2'-0"	ST 403
	A8	4	1 1/2"x 1 1/2"x 1/8" x 8'-8"	ST 402
	A9	2	2"x 2"x 1/4" x 0'-9"	ST 404
	A10	4	2"x 2"x 1/4" x 0'-3"	ST 404
	B	1	12"x 12"x 1/4" x 13'-11 1/2"	ST 303
	C	3	6"x 0.155" x 13'-2 1/2"	ST 303
	D	3	6"x 0.155" x 2'-1"	ST 303
ANGLE CLIPS	C1	24	2"x 2"x 1/4" x 0'-8"	ST 220
"B" SHEAR ANCHOR	SA2	9	3/4" ø REBAR x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3"x 3"x 1/4" x 0'-8"	ST 206
	DUS-2	1	3"x 3"x 1/4" x 1'-0"	ST 206
CONNECTION BAR	CB1	4	1" x 3" x 0'-8"	ST 405
	CB4	6	1" x 3" x 0'-10"	ST 405
CONNECTION PLATES	P1	4	3/8"x 6"x 1'-6"	ST 200
	P2	1	4"x 1"x 2'-6"	ST 400
	P3	1	4"x 1"x 1'-0"	ST 400
	P4	3	6"x 1"x 2'-6"	ST 400
	P5	1	4"x 1"x 2'-6"	ST 401

NOTES: (1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUIV.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARE WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

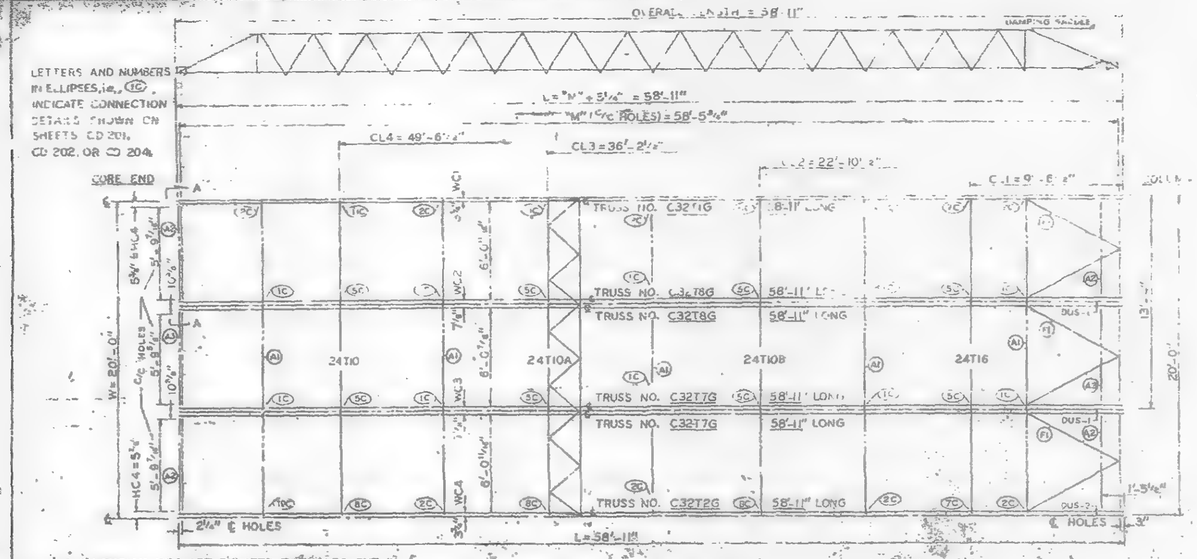
NO	DATE	REVISION	BY
1	6-10-69	AS NOTED	G.D.C.

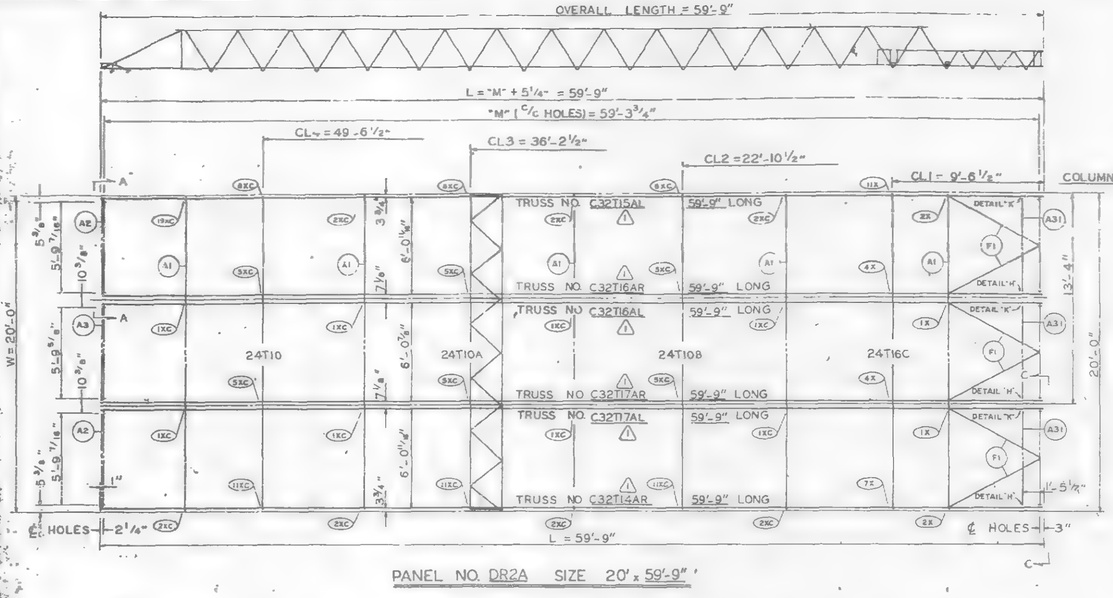
REF. DRWGS.

7-A82-8 & 17	7-22-68
7-A83-0	10-15-68
7-A84-31	7-22-68
7-A86-15,18 & 30	7-22-68
7-A94-42 & 3	10-25-68
W-124	1-6-69
7-181-2,3 & 4	7-22-68

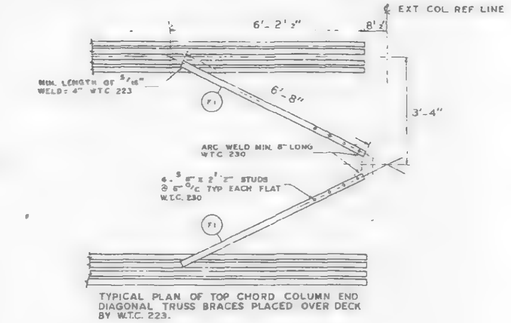
ARC WELD THROUGH

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, OR CD 204.

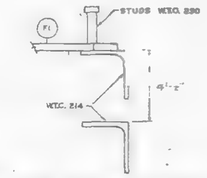




PANEL NO. DR2A SIZE 20' x 59'-9"



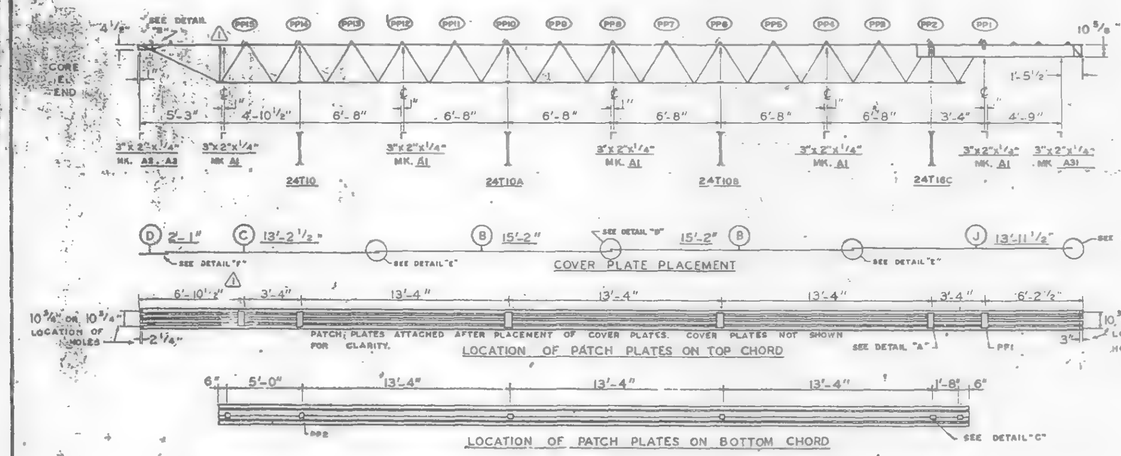
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

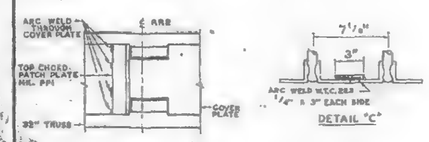


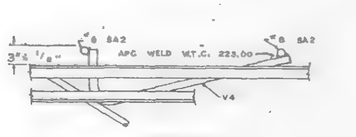
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

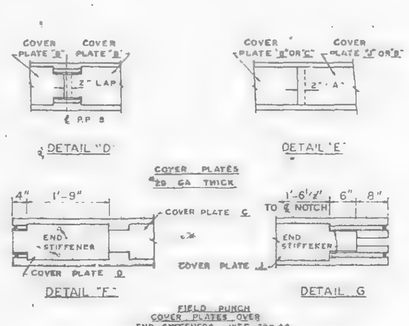
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14AR	1	C32T14AR x 59'-9"	ST 214AL
	T15AL	1	C32T15AL x 59'-9"	ST 215AL
	T16AL	1	C32T16AL x 59'-9"	ST 216AL
	T17AR	1	C32T17AR x 59'-9"	ST 217AL
	T17AL	1	C32T17AL x 59'-9"	ST 217AL
BRIDGING TRUSSES	T10	1	24T10 x 19'-11"	ST 210C
	T10A	1	24T10A x 19'-11"	ST 210D
	T10B	1	24T10B x 19'-11"	ST 210E
	T16C	1	24T16C x 19'-11"	ST 216B
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 5'-11 3/16"	ST 403
	A3	1	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A31	3	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/2"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/4"	ST 304
ANGLE CLIPS	C1	24	2" x 1 1/2" x .28" x 6"	ST 400
7/8" SHEAR ANCHOR	SA2	5	7/8" ø REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
	CB4	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-8"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

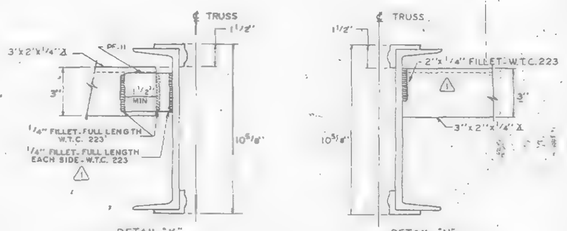
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie... (1)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 02 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

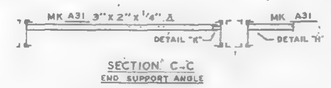


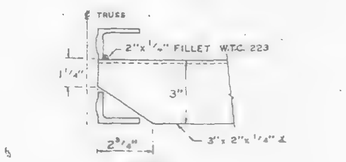












NO.	DATE	REVISION	BY
1	5-12-69	REF. DRWG.	G.D.C
2	2-4-69	AS NOTED	G.D.C

REF DRWG.	
7-AB3-31	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-5	7-22-68
7-AB2-17	10-4-68
SA-124	10-11-68

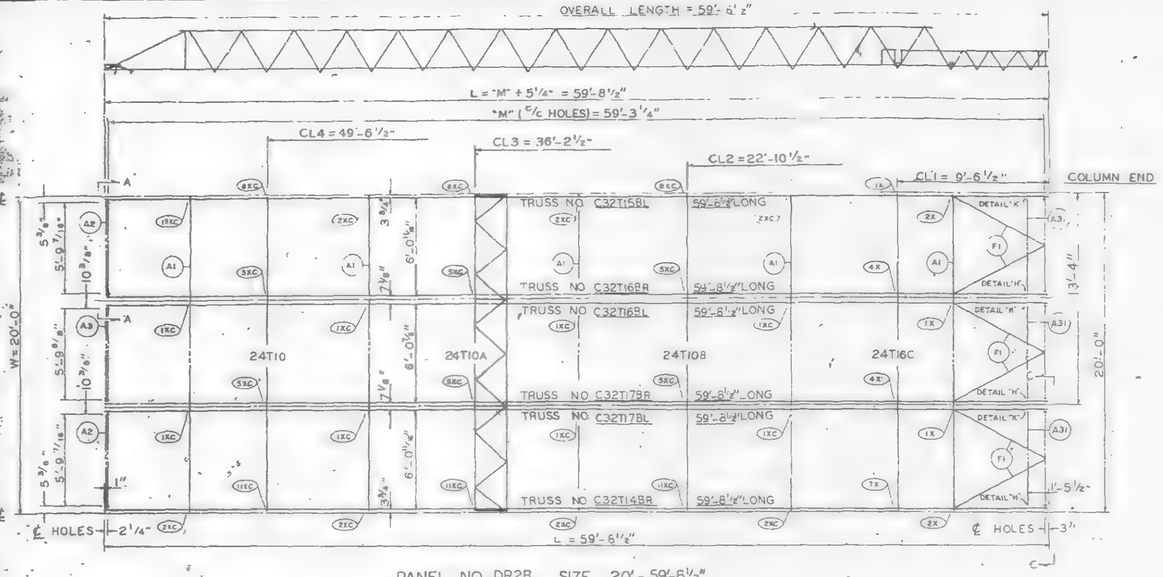
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

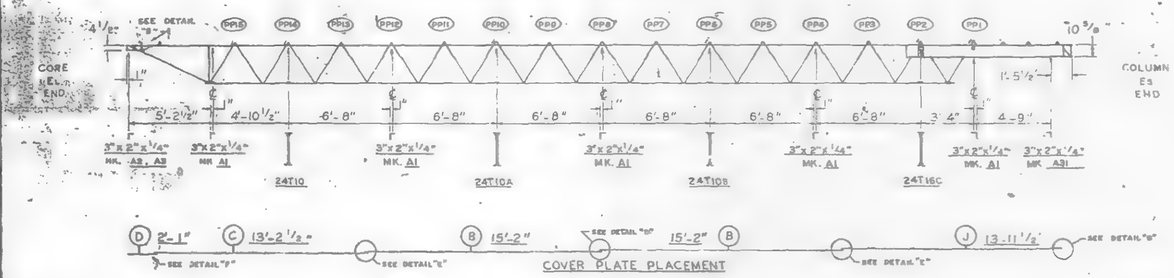
PANEL DR2A - 20' x 59'-9"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-31	PLATE
APPROVED FOR FABRICATION AT ... FOR P.O.N.Y.A.	DATE 6/6/69	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY ... FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE DEC. 5, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP DR2A

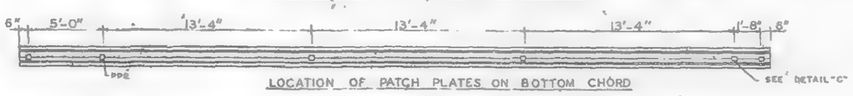


PANEL NO. DR2B SIZE 20' x 59'-8 1/2"

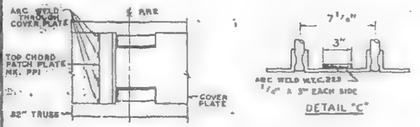


COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD



LOCATION OF PATCH PLATES ON BOTTOM CHORD

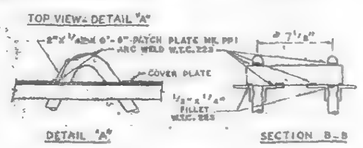


TOP VIEW DETAIL "A"

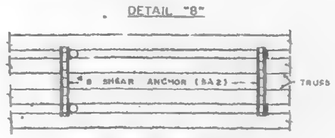
DETAIL "C"

DETAIL "B"

DETAIL "D" DETAIL E



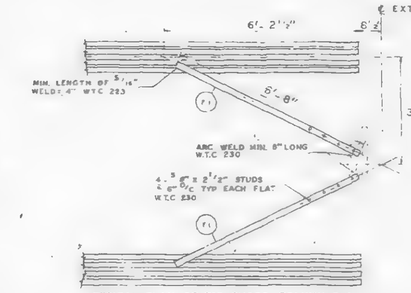
DETAIL "A" SECTION B-B



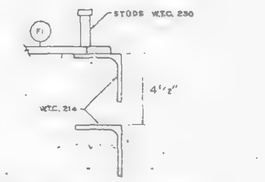
TOP VIEW DETAIL "B"

DETAIL "F" DETAIL G

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



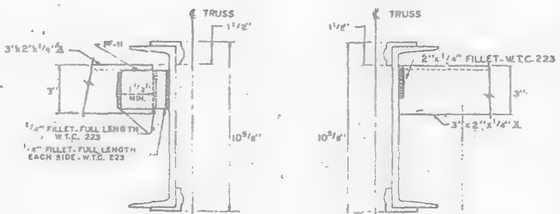
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

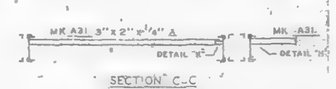
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T14BR	1	C32T14BR x 59'-8 1/2"	ST 214BL
	T15BL	1	C32T15BL x 59'-8 1/2"	ST 215BL
	T16BL	1	C32T16BL x 59'-8 1/2"	ST 216BL
	T16BR	1	C32T16BR x 59'-8 1/2"	ST 216BL
	T17BL	1	C32T17BL x 59'-8 1/2"	ST 217BL
	T17BR	1	C32T17BR x 59'-8 1/2"	
BRIDGING TRUSSES	T-D	1	24T10 x 19'-11"	ST 210C
	T10A	1	24T10A x 19'-11"	ST 210D
	T10B	1	24T10B x 19'-11"	ST 210E
	T16L	1	24T16C x 19'-11"	ST 216B
3"x 2"x 1/4" ANGLE	A1	5	3"x 2"x 1/4" x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4" x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4" x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF 11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/8"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	24	2" x 1" x 2" x .25" x 6"	ST 400
7/8 SHEAR ANCHOR	SA2	8	7/8 REBAR x 0'-8"	ST 400
CONNECTION BAR	CB1	5	1" 0 x 1'-3"	ST 400
	CB4	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x 0'-8 1/8"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	8 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (D).
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

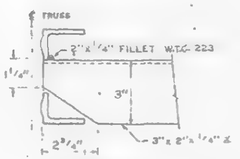


DETAIL "K" END SUPPORT ANGLE ATTACHMENT

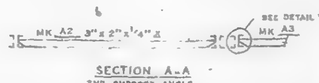
DETAIL "H" END SUPPORT ANGLE ATTACHMENT



SECTION C-C END SUPPORT ANGLE



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE

NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-31	10-4-68
7-AB4-28	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
SA-124	10-11-68

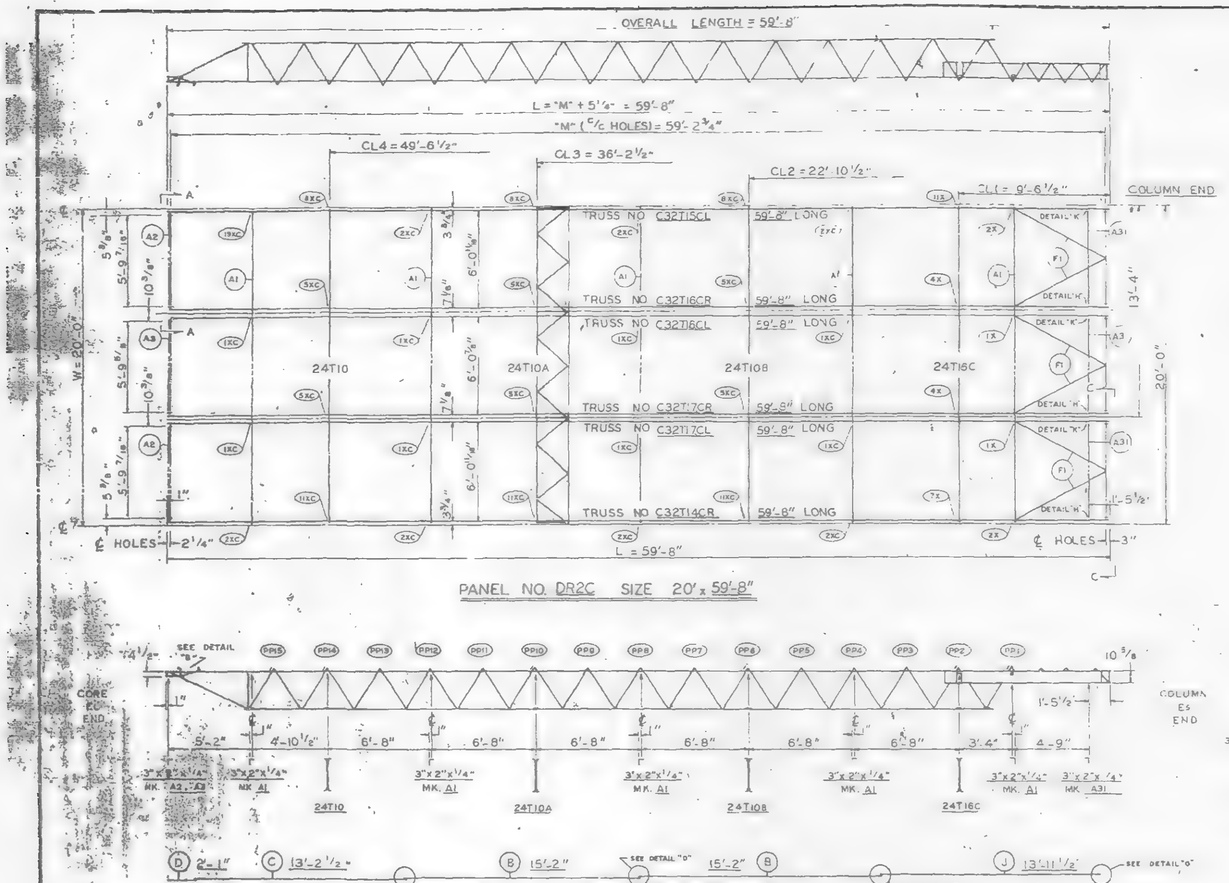
FLOOR PANEL DETAILS
FOR
W.T.C. TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 1 (NORTH)

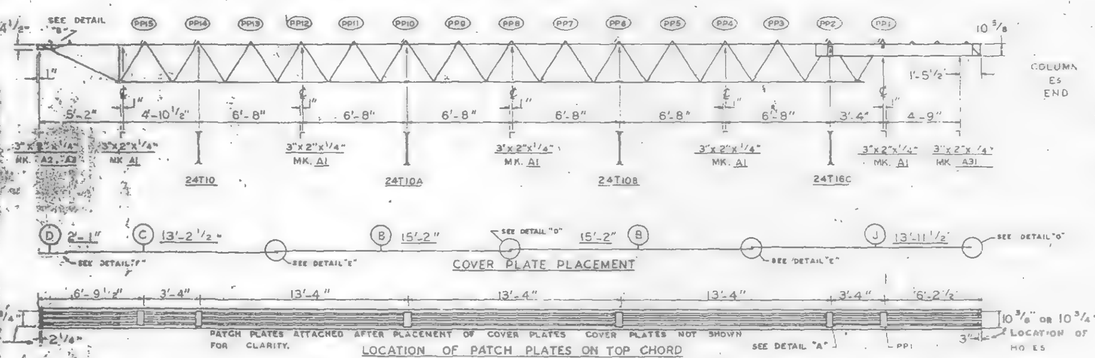
PANEL DR2B - 20' x 59'-8"

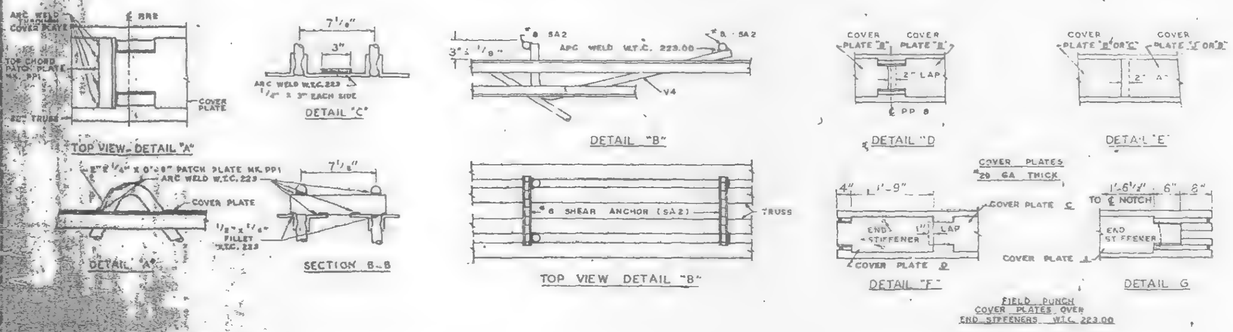
FABRICATION BY LACLEDE STEEL COMPANY

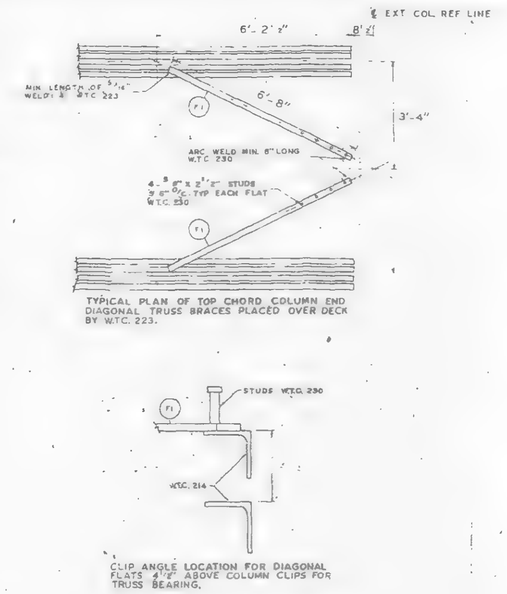
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-31	PLATE
APPROVED FOR FABRICATION FOR PONA	DATE 6/6/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUBA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FD DR2B

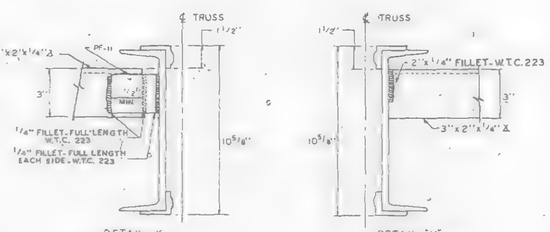


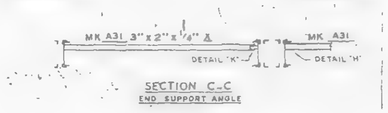
PANEL NO. DR2C SIZE 20' x 59'-8"

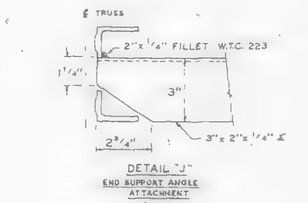


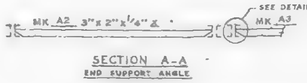












REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS	SIZE	DRWG.
FLOOR TRUSSES	T14CR	1	C32T14CR x 59'-8"	ST 214CL
	T15CL	1	C32T15CL x 59'-8"	ST 215 CL
	T16CL	1	C32T16C x 59'-8"	ST 216CL
	T16CR	1	C32T16CR x 59'-8"	ST 217CL
	T17CR	1	C32T17C x 59'-8"	ST 217CL
BRIDGING TRUSSES	T10	1	24T10 x 19'-11"	BT 210C
	T10A	1	24T10A x 19'-11"	BT 210D
	T10B	1	24T10B x 19'-11"	BT 210E
	T16C	1	24T16C x 19'-11"	BT 216B
3"x 2"x 1/4" ANGLE	A1	5	3"x2"x1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/4"	ST 403
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PP-11	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1/4" x 3 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/4" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 13'-2 1/8"	ST 303
	D	3	9" x .0135" x 2'-1"	ST 303
	J	3	9" x .0135" x 13'-11 1/8"	ST 304
ANGLE CLIPS	C1	24	2" x 1" x 0.25" x 6"	ST 400
ø 8 SHEAR ANCHOR	SA2	6	ø 8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	5	1" ø x 1'-3"	ST 400
	CB4	6	1" ø x 0'-10"	ST 400
CONNECTION PLATES	P1	3	3 1/2" x 3/8" x C'-6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P4	3	6 1/2" x 1/2" x 0'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (1X).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x1/4" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

REF. DRWG.

7-AB3-31	10-4-68
7-AB4-26	7-22-68
7-AB1-13	10-4-68
7-AB1-14, 15 & 16	10-4-68
7-AB2-13	10-4-68
7-AB2-17	10-4-68
SA-124	10-11-68

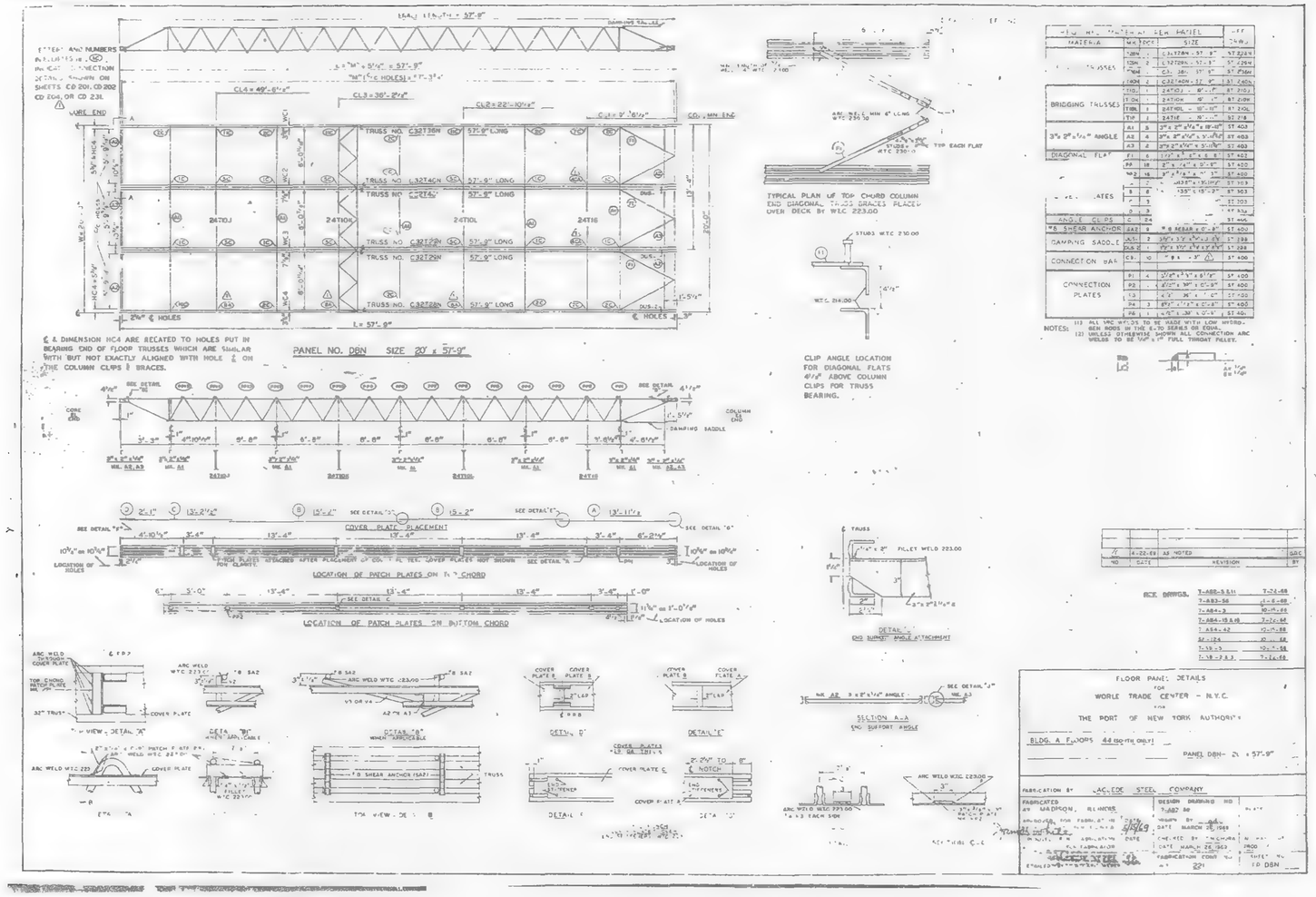
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

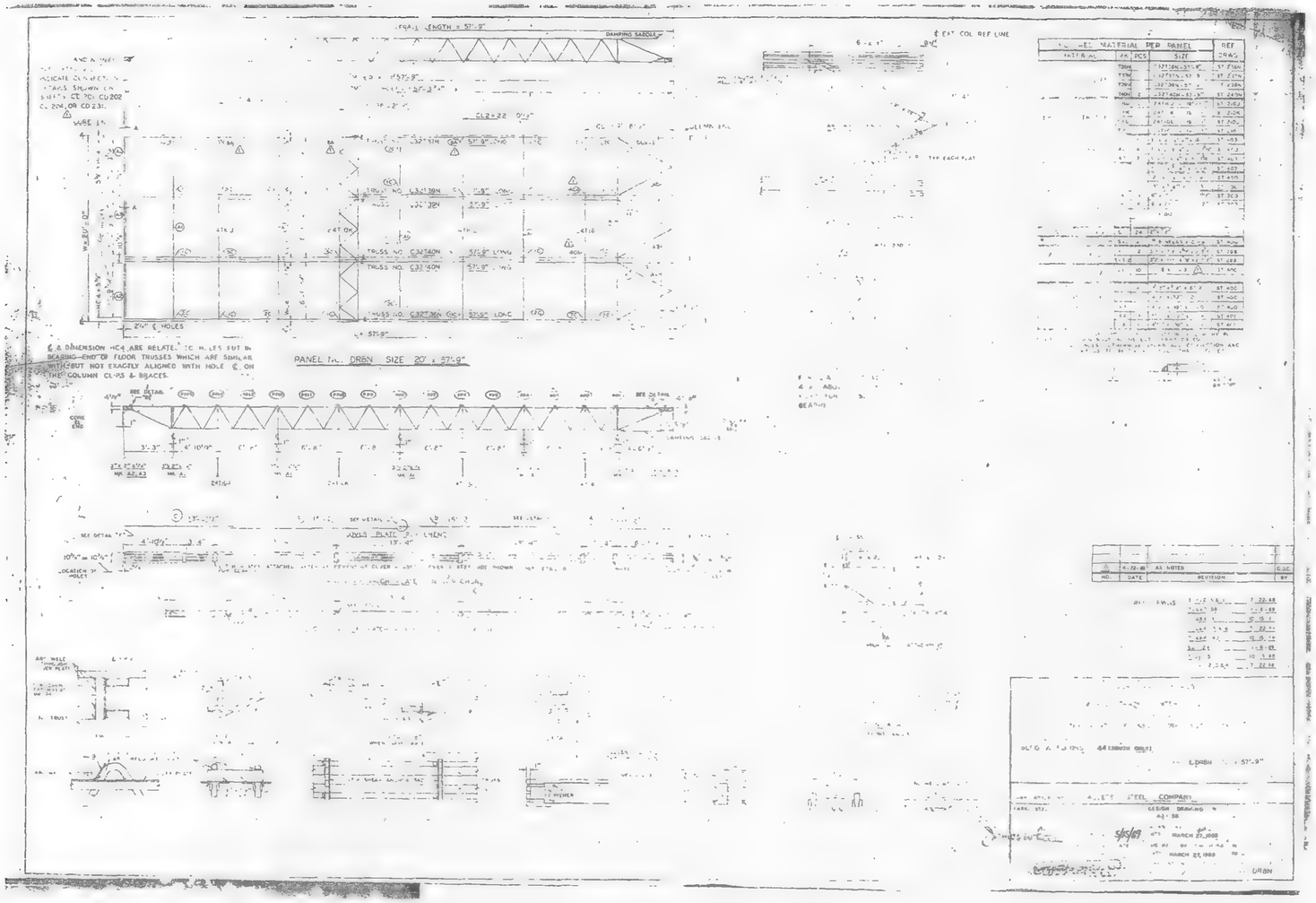
BLDG A FLOORS 59 & 92 (SOUTH)

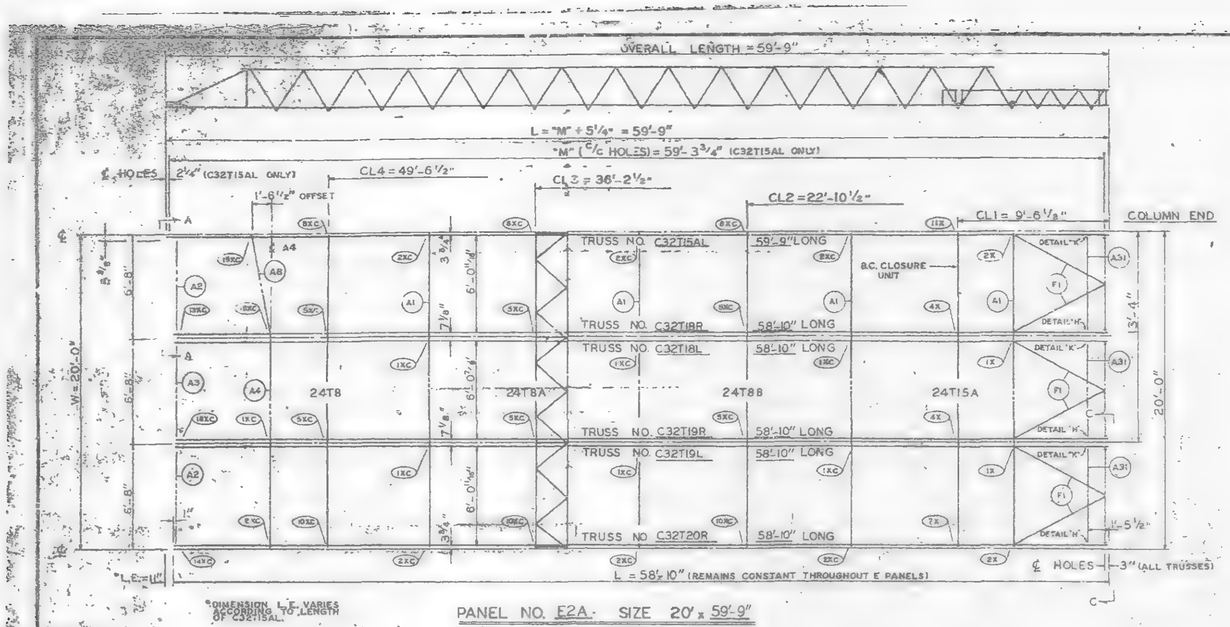
PANEL DR2C - 20' x 59'-8"

FABRICATION BY LACLEDE STEEL COMPANY

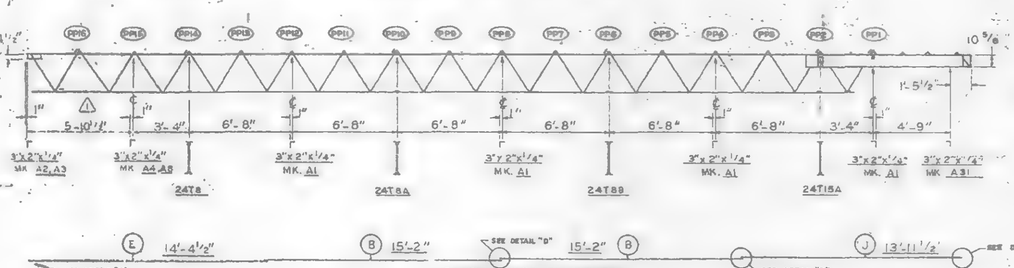
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING No. 7-AB3-31	PLATE
APPROVED FOR FABRICATION FOR PONYA	DATE 6/16/69	DRAWN BY DJ DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY ANDY MILLER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP DR2C1

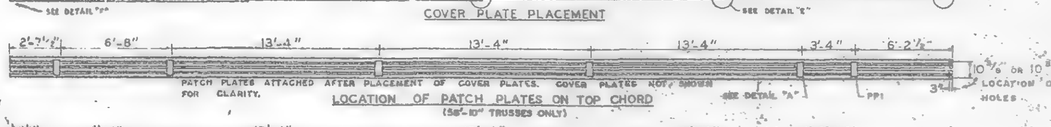

LEAD LENGTH = 57'-8"
CL4 = 49'-6 1/2"
CL3 = 38'-2 1/2"
CL2 = 22'-10 1/2"
CL1 = 7'-6 1/2"
WIRE END
COLUMN END
TRUSS NO. C32T38N 57'-8" LONG
TRUSS NO. C32T46N 57'-8" LONG
TRUSS NO. C32T46S 57'-8" LONG
TRUSS NO. C32T52N 57'-8" LONG
TRUSS NO. C32T52S 57'-8" LONG
24T10J
24T10H
24T10L
24T16
WC1
WC2
WC3
WC4
WC5
DUB-24
DUB-16
2 3/4" ø HOLES
L = 57'-8"
PANEL NO. DBN SIZE 20' x 57'-8"
℄ & DIMENSION NC4 ARE RELATED TO HOLES PUT IN BEARING END OF FLOOR TRUSSES WHICH ARE SIMILAR WITH BUT NOT EXACTLY ALIGNED WITH HOLE ℄ ON THE COLUMN CLIPS & BRACES.
SEE DETAIL "N"
SEE DETAIL "M"
CORE
COLUMN WC END
DAMPING SADDLE
2'-1"
13'-2 1/4"
13'-4"
SEE DETAIL "F"
SEE DETAIL "E"
SEE DETAIL "D"
SEE DETAIL "G"
COVER PLATE PLACEMENT
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD
LOCATION OF PATCH PLATES ON BOTTOM CHORD
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY WTC 223.00
ARC WELD WTC 223.00
TOP EACH FLAT
STUD3 WTC 210.00
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 6" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
DETAIL "A"
DETAIL "B"
DETAIL "C"
DETAIL "D"
DETAIL "E"
SECTION A-A END SUPPORT ANGLE
DETAIL "F" END SUPPORT ANGLE ATTACHMENT
TRUSS
FILLET WELD 223.00
ARC WELD WTC 223.00
ARC WELD WTC 223.00
ARC WELD WTC

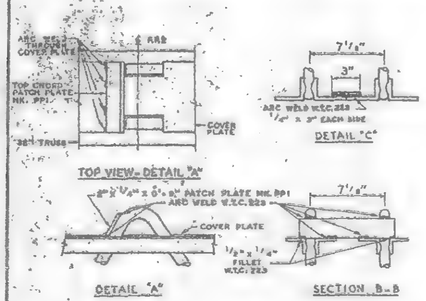

PANEL MK. DR8N SIZE 20' x 57'-9"
DAMPING SADDLE
ADJ'S PLATE
DR8N

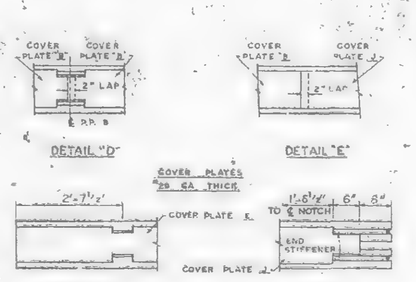


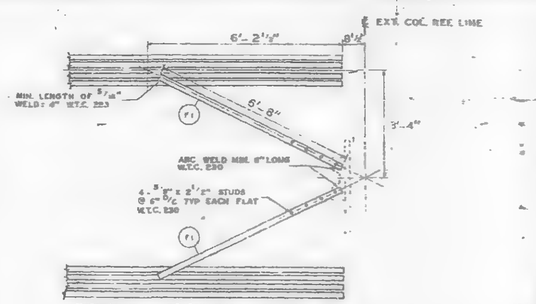
PANEL NO. E2A - SIZE 20' x 59'-9"

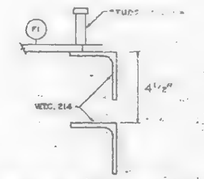






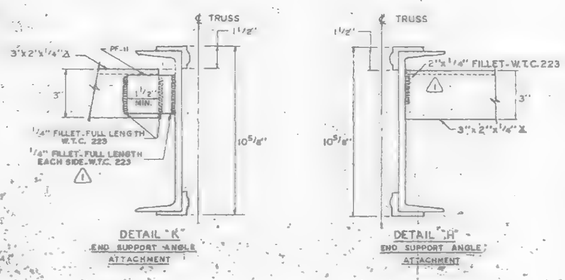






REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T15L	1	C32T15AL x 59'-9"	ST 215AL
	T18R	1	C32T18R x 58'-10"	ST 218L
	T18L	1	C32T18L x 58'-10"	ST 219L
	T19R	1	C32T19R x 58'-10"	ST 219L
	T20R	1	C32T20R x 58'-10"	ST 220L
BRIDGING TRUSSES	T0	1	24T8 x 19'-11"	BT 208
	T8A	1	24T8A x 19'-11"	BT 208A
	T8B	1	24T8B x 19'-11"	BT 208B
	T15A	1	24T15A x 9'-11"	BT 215A
3"x 2"x 1/4" ANGLE	A1	4	3"x 2"x 1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-11 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-1 1/2"	ST 403
	A4	1	3"x 2"x 1/4"x 3'-3"	ST 403
	A8	1	3"x 2"x 1/4"x 8'-8"	ST 405
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PF-11	3	3"x 1/4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	6	1 1/2" x 5/16" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x 1/4" x 0'-8"	ST 400
	PP2	18	5"x 3/16" x 0'-3"	ST 400
COVER PLATES	B	8	9"x .0135" x 15'-2"	ST 303
	E	3	9"x .0135" x 14'-4 1/2"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1'-4" D x 6'-8 1/2"	BT 215A
ANGLE CLIPS	C1	20	2"x 1 1/2"x .25"x 6"	ST 400
	C2	4	3 1/2"x 1 1/2"x .25"x 6"	ST 400
#8 SHEAR ANCHOR	SA2	0	#8 REBAR x 0'-6"	ST 400
CONNECTION BAR	CB1	2	1" D x 1'-3"	ST 400
	CB2	6	1 3/16" D x 1'-3"	ST 400
	CB3	6	1 3/16" D x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3/16"x 3'-8"x 8 1/2"	ST 400
	P2	1	4 1/2"x .38"x 0'-9"	ST 400
	P3	1	4 1/2"x .38"x 1'-0"	ST 400
	P5	3	4 1/2"x 1/4" x 1'-6"	ST 400
	P6	1	4 1/2" x .38" x 0'-9"	ST 401
	P9	6	3"x 1/2"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS. i.e. (J5).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1"x 1/4" FULL THROAT FILLET.



NO.	DATE	REVISION	BY
2	7-1-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

REF DRWG.

7-A83-32	10-4-68
7-A83-24	8-15-68
7-A81-14, 17, 18 & 19	10-4-68
7-A82-3	7-22-68
7-A82-14	10-4-68
SA-124	10-11-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH) ℄ E2A - 20' x 59'-9"

BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST) 2

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO 7-A83-32 PLATE

APPROVED FOR FABRICATION BY James Wichers N.Y.A. DATE 1/2/70

DRAWN BY Fuch DATE DEC. 5, 1968

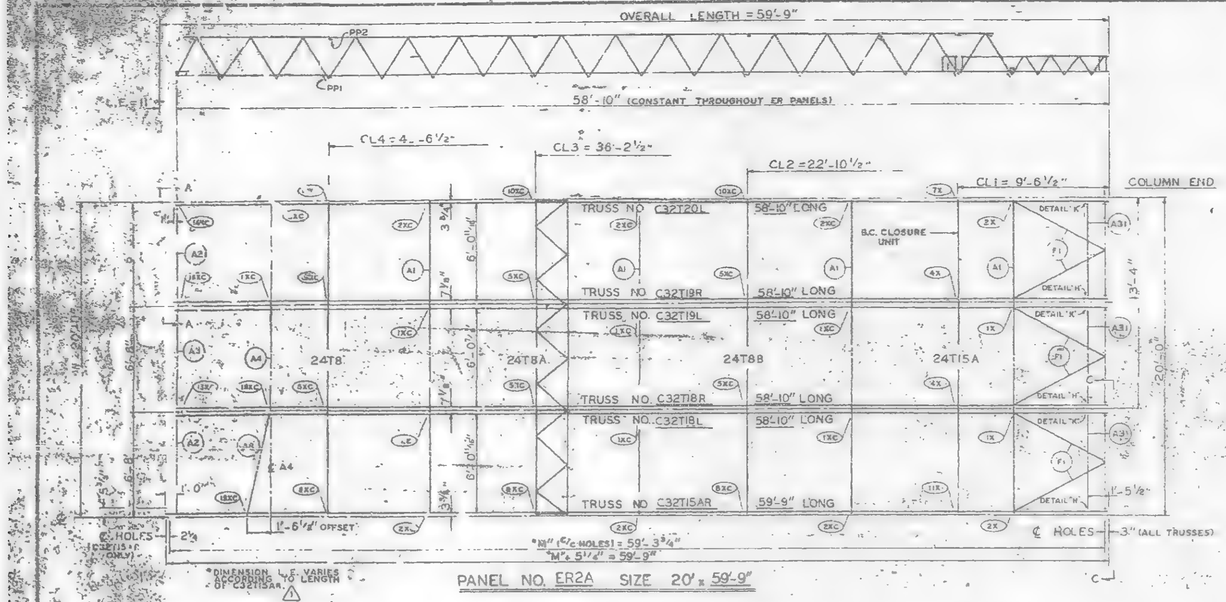
APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

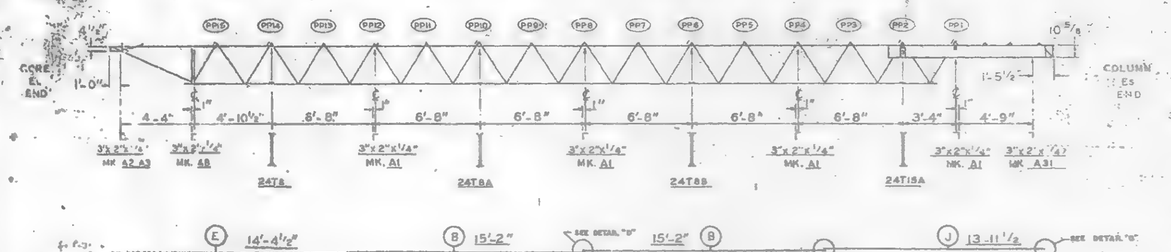
CHECKED BY T.M. GHUBA DATE DEC. 5, 1968 IN CHARGE OF PROD. DEV.

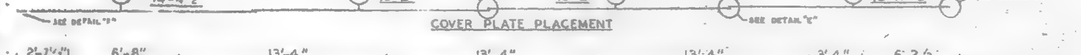
DETAILED BY A.C. VIEBEG

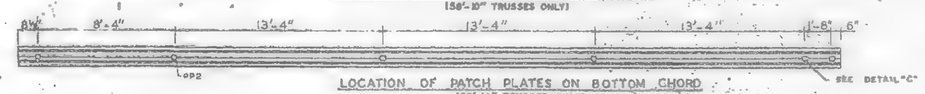
FABRICATION CONT NO W.T.C. 221

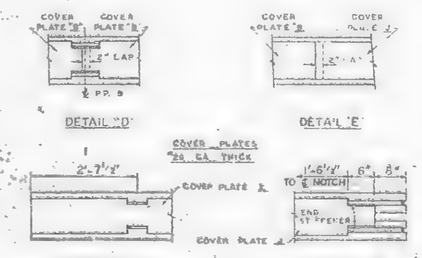
SHEET NO FP-E2A

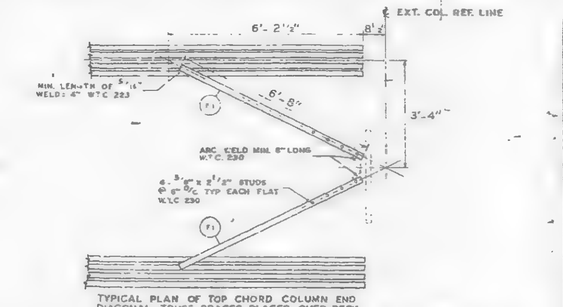


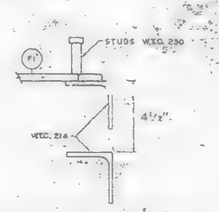


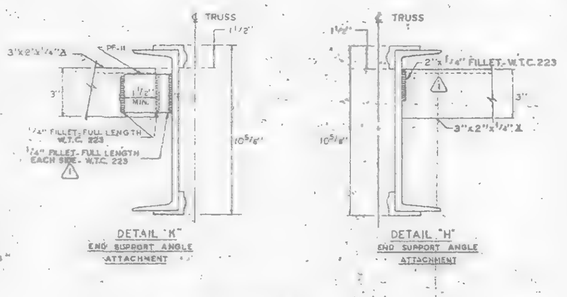


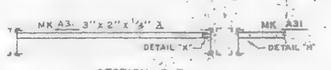


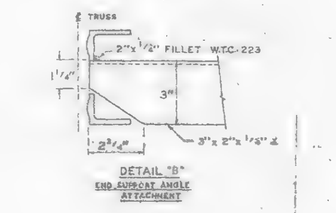












REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DWG.
FLOOR TRUSSES	T15AR	1	C32T15AR x 59'-9"	ST 215AL
	T18L	1	C32T18L x 58'-10"	ST 218L
	T18R	1	C32T18R x 58'-0"	ST 218L
	T19L	1	C32T19L x 58'-10"	ST 219L
	T19R	1	C32T19R x 58'-10"	ST 219L
	T20L	1	C32T20L x 58'-10"	ST 220L
BRIDGING TRUSSES	T8	1	24T8 x 19'-11"	ST 208
	T8A	1	24T8A x 19'-1"	ST 208A
	T8B	1	24T8B x 19'-11"	ST 208B
	T15A	1	24T15A x 19'-11"	ST 215A
3"x 2"x 1/4" ANGLE	A1	4	3"x2"x1/4"x 19'-11"	ST 403
	A2	2	3"x 2"x 1/4"x 5'-1 9/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-11 3/16"	ST 403
	A4	1	3"x 2"x 1/4"x 13'-3"	ST 403
	A8	1	3"x 2"x 1/4"x 6'-8 8"	ST 405
	A31	3	3"x 2"x 1/4"x 5'-8 1 8"	ST 410
CLOSURE PLATES	PF-11	3	3" x 1/4" x 0'-2 3/8"	ST 4-2
DIAGONAL FLATS	F1	6	1'-2" x 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 15'-2"	ST 303
	E	3	9"x .0135" x 14'-4 1/2"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1'-1/4" O x 6'-6 1/2"	BT 215A
ANGLE CLIPS	C1	20	2"x 1 1/2" x .25" x 6"	ST 400
	C2	4	2 1/2" x 1 1/2" x .25" x 8"	ST 400
7/8" SHEAR ANCHOR	SA2	0	7/8" DIA. REBAR x 0'-6"	ST 400
CONNECTION BAR	CB1	2	1" O x 1'-3"	ST 400
	CB2	6	1 3/16" O x 1'-3"	ST 400
	CB3	6	1 3/16" O x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3" O" x 6 1/2"	ST 400
	P2	1	4 1/2" x .30" x 0'-9"	ST 400
	P3	1	6 1/2" x .38" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/2" x 1'-0"	ST 400
	P8	1	4 1/2" x .38" x 0'-9"	ST 401
	P6	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie., (A).
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & 02 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

NO.	DATE	REVISION	BY
2	7-1-69	AS NOTED	G.D.C
1	2-4-69	AS NOTED	G.D.C

REF. DRWG.

7-A83-23	10-4-68
7-A83-24	R-15-69
7-A81-16, 17, 18 & 19	10-4-68
7-A82-3	7-22-68
7-A82-18	10-4-68
SA-124	10-11-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL ER2A = 20' x 59'-9"
BLDG. B FLOORS 25 (EAST & WEST) 30 & 60

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83-23	PLATE
APPROVED FOR FABRICATION BY James L. Wilson	DATE 1/2/70	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE DEC. 5, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]		FABRICATION CONT NO W.T.C. 221	SHEET NO FP ER2A 1

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

OVERALL LENGTH = 59'-9"

L = "M" + 5 1/16" = 59'-9"

"M" (C/C HOLES) = 59'-3 3/16"

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/8"

CL2 = 22'-10 1/2"

CL1 = 9'-6 1/2"

CORE END

COLUMN END

1'-6 1/2" OFFSET

TRUSS NO. C32T2A 59'-9" LONG

TRUSS NO. C32T3 58'-10" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T10 56'-10" LONG

24T8

24T8A

24T8B

24T15

DUS-1

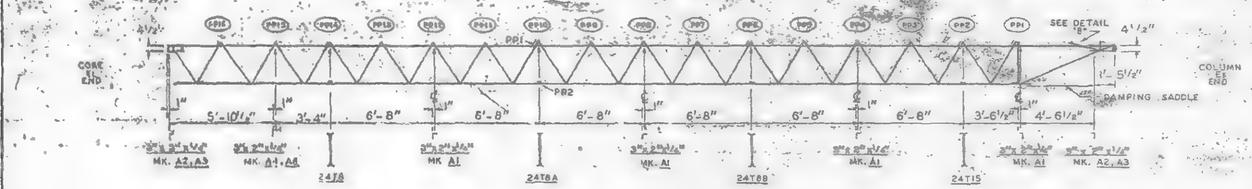
DUS-3

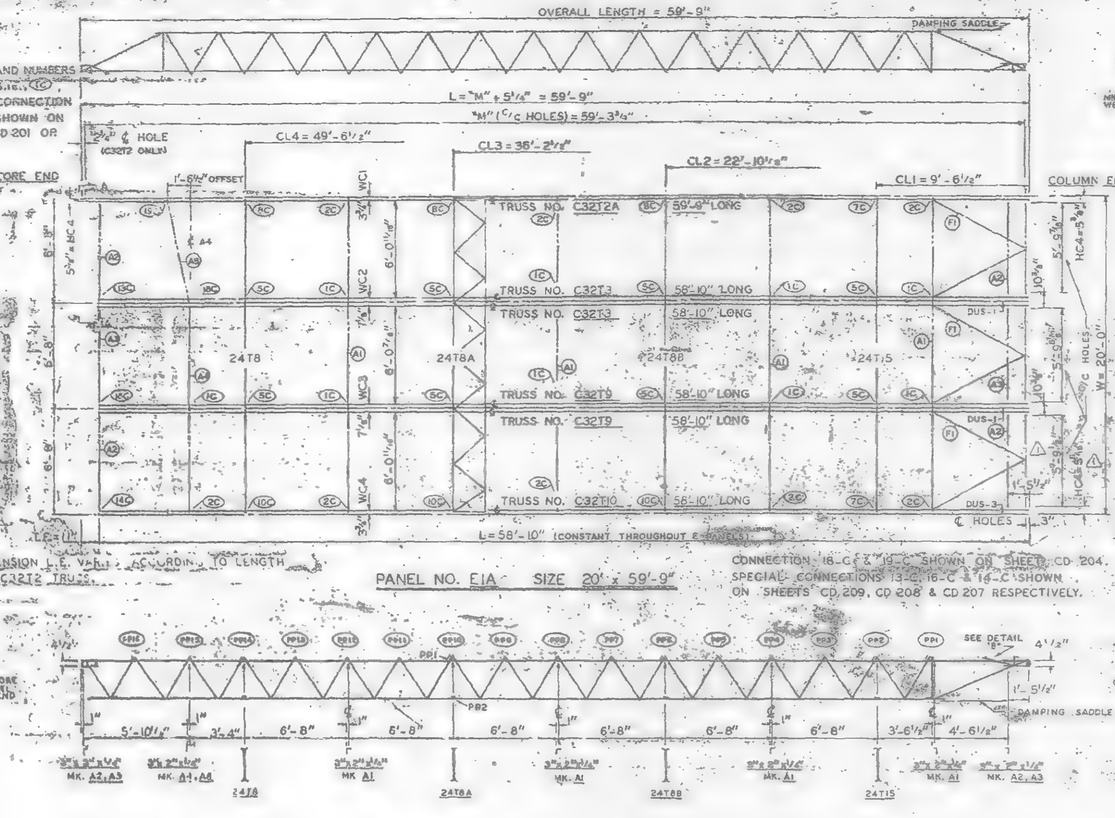
L = 58'-10" (CONSTANT THROUGHOUT EXCEPT CORE END)

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1A SIZE 20' x 59'-9"

CONNECTION 18-C x 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 16-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

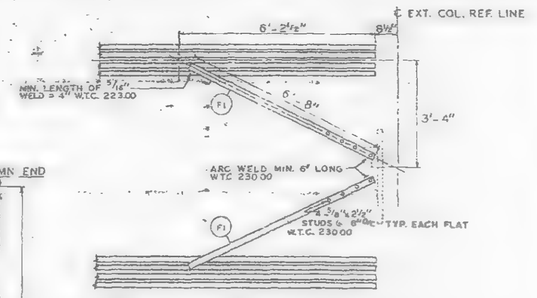




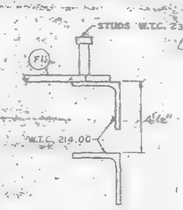
COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD (55'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (56'-10" TRUSSES ONLY)



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00



CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL FOR PANEL				REF DRWG
MATERIAL	MARK	QTY	SIZE	
FLOOR TRUSSES	T2A	1	C32T2A - 59'-9"	ST 202A
	T3	2	C32T3 - 58'-10"	ST 202
	T9	2	C32T9 - 58'-10"	ST 202
	T10	1	C32T10 - 56'-10"	ST 202
BRIDGING TRUSSES	T8	1	24T8 - 9'-11"	ST 6
	T8A	1	24T8A - 10'-11"	ST 7
	T8B	1	24T8B - 10'-11"	ST 7
	T15	1	24T15 - 9'-11"	ST 5
3" x 2" x 1/4" ANGLE	A1	1	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 1/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 7/16"	ST 403
	A4	1	3" x 2" x 1/4" x 3'-3"	ST 403
	A6	1	3" x 2" x 1/4" x 6'-3 1/2"	ST 403
DIAGONAL FLATS	F	1	1" x 6" x 6'-7"	ST 5
COVER PLATES	A	3	9" x 0.135" x 13'-11 1/2"	ST 5
	B	5	18" x 0.135" x 15'-2"	ST 502
	L	3	5" x 0.135" x 14'-4 1/2"	ST 503
ANGLE CLIPS	C1	10	2" x 2" x 1/4" x 0'-6 1/2"	ST 400
	C2	4	2 1/2" x 2 1/2" x 1/4" x 0'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-5 5/8"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/16" x 5'-0 1/2"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	8	1 1/8" ϕ x 1'-3"	ST 400
	CB3	6	1 3/8" ϕ x 1'-5"	ST 400
CONNECTION PLATES	F1	5	3" x 2" x 3/16" x 0'-7"	ST 400
	P2	1	4" x 3" x 3/8" x 0'-6"	ST 400
	P3	1	4" x 3" x 3/8" x 0'-10"	ST 400
	P5	3	4" x 3" x 1/2" x 0'-6"	ST 400
	P8	1	4" x 3" x 5/8" x 0'-7"	ST 401
3/4" ϕ SHEAR ANCHOR	SA2	6	3/4" ϕ HEADED STUD x 4"	ST 401
PATCH PLATES	PP1	16	2'-8" x 0'-9" x 0'-9"	ST 400
	PP2	18	3" x 3 1/4" x 0'-3"	ST 400

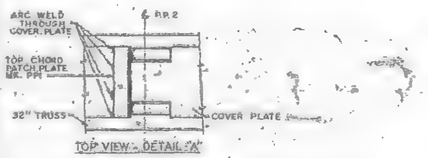
(1) ALL ARC-WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

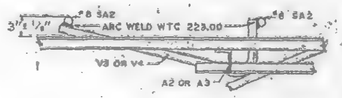
NO.	DATE	REVISION	BY
2	6-18-69	AS NOTED	G.V.C.
1	9-0-68	AS NOTED	G.V.C.

(2) REF. DRWGS.

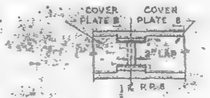
7-AB3-3 & 13	7-22-68
7-AB3-11	10-15-68
7-AB4-3.1	4-2-68
7-AB4-13 & 13A	7-22-68
7-AB4-42 & 43	8-15-68
SA-124	1-8-68
7-AB1-3	7-22-68
7-AB1-6,7 & 8	3-22-68



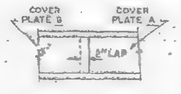
TOP VIEW - DETAIL "A"



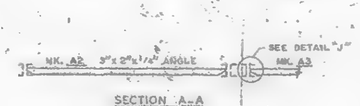
DETAIL "B"



DETAIL "D"



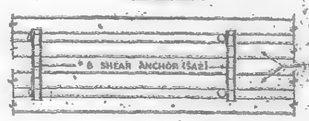
DETAIL "E"



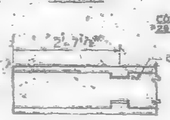
SECTION A-A
END SUPPORT ANGLE

DETAIL "B"

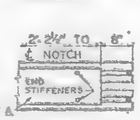
SECTION B-B



TOP VIEW - DETAIL "B"

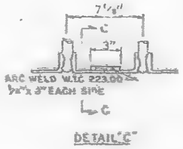


DETAIL "F"



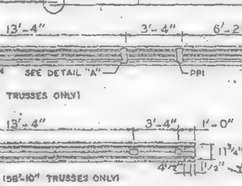
DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "C"

SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (NORTH & SOUTH) 49, 58, 60-PL. PR.
69 (NORTH) PANEL E1A - 20' x 59'-9"
BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 49 (SOUTH & NORTH)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-11	PLATES
APPROVED FOR FABRICATION BY James MacMillan	DATE 11/3/70	DRAWN BY GDL	
APPROVED FOR FABRICATION BY	DATE	DATE JULY 22, 1968	
DETAILED BY [illegible]		CHECKED BY T.M. MURRA	IN CHARGE OF PROD. REV.
		DATE JULY 22, 1968	
		FABRICATION CONT. NO W.T.C. 221	SHEET NO. EP E1A

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

OVERALL LENGTH = 59'-8 1/4"

DAMPING SADDLE

L = "M" + 5 1/4" = 59'-8 1/2"

"M" (C to C HOLES) = 59'-8 1/4"

3/4" ø HOLE (C32T2 ONLY)

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/2"

L2 = 22'-10 1/2"

CL1 = 9'-6 1/2"

CORE END

COLUMN END

6 1/2" OFFSET

TRUSS NO. C32T2B 59'-8 1/2" C to C

TRUSS NO. C32T3 58'-10" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T10 (10C) 58'-10" LONG

24T8 24T8A 24T8B 24T15

WC1 WC2 WC3 WC4

HC4 @ 8 3/4"

HC4 @ 5 3/4"

W = 80'-0"

C to C HOLES

3"

L = 58'-10" (CONSTANT THROUGHOUT 5 PANELS)

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TYP.

PANEL NO. E1B SIZE 20' x 59'-8 1/2"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 15-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

PP1 PP2 PP3 PP4 PP5 PP6 PP7 PP8 PP9 PP10 PP11 PP12 PP13 PP14 PP15

SEE DETAIL "E"

4 1/2"

1" 5 1/2"

DAMPING SADDLE

5'-10 1/4" 1" 1/4" 6'-8" 1" 6'-8" 1" 6'-8" 1" 6'-8" 1" 6'-8" 1" 6'-8" 1" 3'-6 1/2" 1" 4'-6 1/2"

3/4"x 2"x 1'-4" MK. A1, A2 — 3/4"x 2"x 1'-4" MK. A4, A5 — 3/4"x 2"x 2'-4" MK. A1 — 3/4"x 2"x 3'-4" MK. A1 — 3/4"x 2"x 4'-4" MK. A1 — 3/4"x 2"x 3'-4" MK. A1 — 3/4"x 2"x 2'-4" MK. A1 — 3/4"x 2"x 3'-4" MK. A2, A3

24T8 24T8A 24T8B 24T15

E 14'-4" B 15'-2" SEE DETAIL "D" B 15'-2" SEE DETAIL "F" A 13'-11 1/2" SEE DETAIL "G"

COVER PLATE PLACEMENT

SEE DETAIL "B" 6" 8'-4" 13'-4" 6'-8" 13'-4" 13'-4" 3'-4" 6'-2 1/2"

PATCH PLATES FOR CLARITY ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN SEE DETAIL "A"

10 3/4" on 10 3/4" LOCATION OF HOLES

3 1/2"

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

8" 8'-4" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

SEE DETAIL "C"

PP2

1 1/2" on 1'-0 1/2" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

ARC WELD THROUGH COVER PLATE TOP CHORD "H" PATCH PLATE MAY BE OMITTED

32" TRUSS COVER PLATE

TOP VIEW - DETAIL "A"

3"x 1/2" ARC WELD W.T.C. 223.00 V3 OR V4 A2 OR A3

DETAIL "B"

COVER PLATE B COVER PLATE B 2" LAP

DETAIL "D"

COVER PLATE B COVER PLATE A 2" LAP

DETAIL "E"

ARC WELD W.T.C. 223.00 COVER PLATE 7" 1/4" x 0'-9" PATCH PLATE (BP) ARC WELD W.T.C. 223.00 VALLEY W.T.C. 223.00

DETAIL "F" SECTION B-B

1" ø SHEAR ANCHOR (TYP.) TRUSS

TOP VIEW - DETAIL "B"

COVER PLATES REQ. 6A. TRUCK

COVER PLATE E 2" NOTCH 6" END OTHERWISE COVER PLATE E

FIELD PUNCH COVER PLATES OVER AND STIFFENERS WITH 25/32 HOLES

DETAIL "I" DETAIL "J"

SEE DETAIL "J" NK. A3

AP 3"x 2"x 1/4" ANGLE

SECTION A-A

END SHEAR ANGLE

3/4" ø SHEAR STUD

DETAIL "K"

ARC WELD W.T.C. 223.00 3" PATCH PLATE

SECTION C-C

EXT. COL. REF. LINE

4"

1/2" EACH FLAT

TYPICAL PLAN OF TOP CHORD END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

STUDS W.T.C. 230.00

W.T.C. 224.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T2B	1	C32T2B - 59-8 1/2"	ST 202B
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGE TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-1 1/2"	ST 403
	A3	2	3" x 2" x 1/4" x 8'-4 1/2"	ST 403
	A4	1	3" x 2" x 1/4" x 3'-7"	ST 403
	A5	1	3" x 2" x 1/4" x 6'-4 1/2"	ST 403
DIAGONAL FLATS	F	1	1" x 7" x 8'-8"	ST 402
COVER PLATES	A	3	0" x .0135" x 13'-11 1/2"	ST 303
	B	6	6" x .0135" x 13'-2"	ST 303
	E	3	9" x .0135" x 13'-11 1/2"	ST 303
ANGLE CLIPS	C1	20	2" x 1/4" x 1'-5"	ST 400
	C2	4	2" x 1 1/2" x 1'-6"	ST 400
DAMPING SADDLE	D1	12	3" x 3" x 3'-3"	ST 208
	D3	1	3" x 3" x 5'-3"	ST 208
CONNECTION BAR	CB1	1	1" x 6" x 1'-3"	ST 400
	CB2	6	1" x 6" x 1'-5"	ST 400
	CB3	6	1" x 6" x 1'-9"	ST 400
CONNECTION PLATES	P1	5	3/4" x 2" x 1'-6"	ST 400
	P2	1	4" x 2" x 3'-6"	ST 400
	P3	1	4" x 2" x 4'-6"	ST 400
	P5	3	4" x 2" x 11'-0"	ST 400
	P6	1	4" x 2" x 11'-9"	ST 401
3/4" ø SHEAR ANCHOR	SA2	8	3/4" ø SHEAR x 8'-4"	1-4-1
PATCH PLATES	PP1	18	2" x 1/4" x 1'-1"	ST 400
	PP2	18	3" x 1/4" x 1'-1"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. 4000 KG RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ANGLE WELDS TO BE 1/2" ø FULL THROAT FILLET.

NO	DATE	REVISION	BY
6	6-18-69	AS NOTED	

REF DRWGS.

7-A487-3 A12	7-22-68
7-A487-1	10-15-68
7-A484-31	7-1-68
7-A484-15,618,738	7-22-68
7-A484-42 A 3	11-13-68
SA-124	1-3-69
7-A81-3	7-22-68
7-A81-6	7-22-68

FLOOR PANEL DETAILS

FOR

WORLD TRADE CENTER - N.Y.C.

FOR

THE PORT OF NEW YORK AUTHORITY

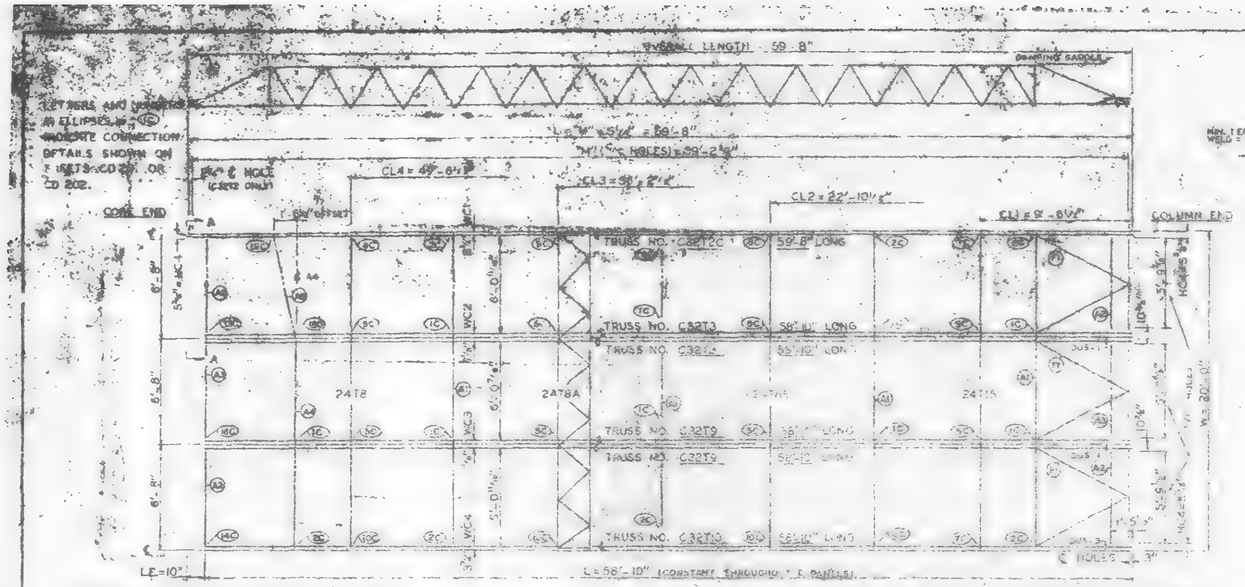
BLDG. A FLOORS 84-91, 93-106 (N)

RANGE E1B

BLDG. B FLOORS 84-91, 93-105 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

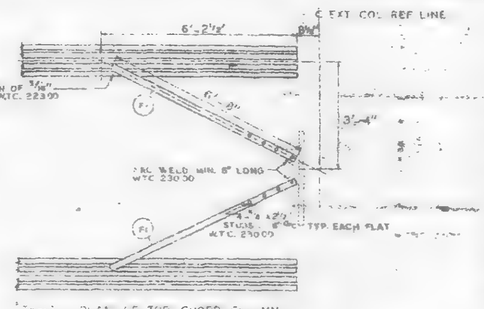
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A484-31
APPROVED FOR FABRICATION FOR BOW & ARROW	DRAWN BY DATE NOV. 1, 1968
APPROVED FOR FABRICATION BY FOR FABRICATOR	CHECKED BY: T.M. CHUNG DATE NOV. 1, 1968
	FABRICATION SHOP NO.



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

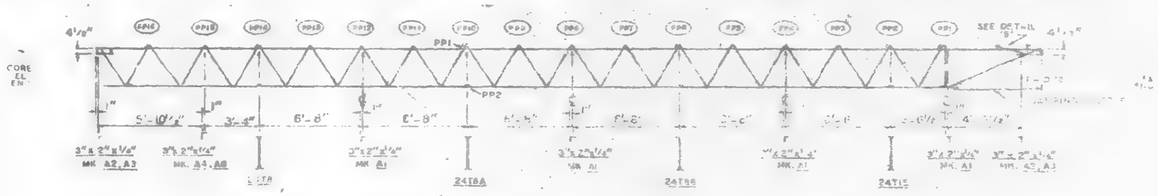
PANEL NO. E1C SIZE 20' x 59'-8"

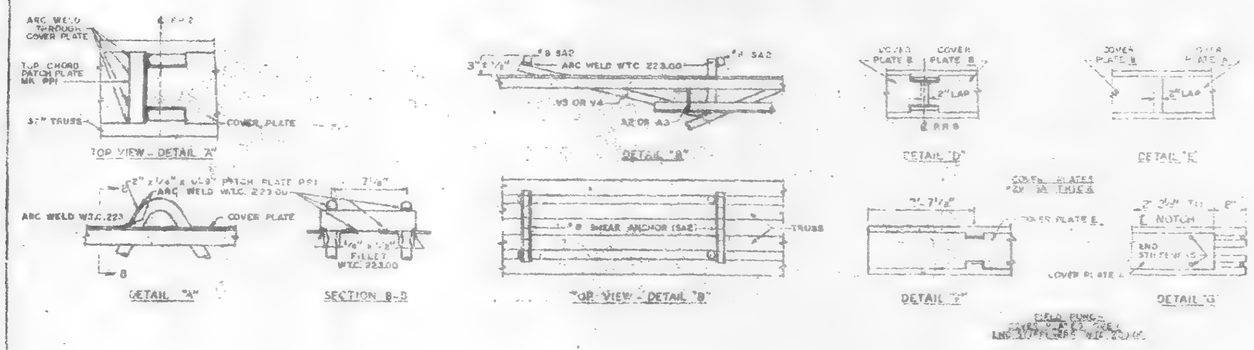
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

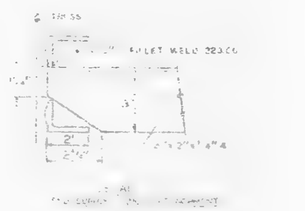


REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T2C	1	C32T2C - 59'-8"	ST 202C
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 39'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T8S	1	24T8S - 39'-11"	ST 215
3"x 2"x 5/16" ANGLE	A1	4	3"x 2"x 5/16" x 59'-8"	ST 403
	A2	4	3"x 2"x 5/16" x 59'-8"	ST 403
	A3	2	3"x 2"x 5/16" x 8'-11"	ST 403
	A4	1	3"x 2"x 5/16" x 1'-3"	ST 403
	A4B	1	3"x 2"x 5/16" x 8'-0"	ST 405
DIAGONAL FLATS	L1	6	1/2" x 3" x 8'-8"	ST 402
COVER PLATES	A	3	8"x .0135"x 18'-11"	ST 303
	B	6	8"x .0135"x 18'-2"	ST 303
	E	3	9"x .0139" x 14'-6 7/8"	ST 303
ANGLE CLIPS	C1	20	2"x 3/16" x 1'-4" x 0'-8"	ST 400
	C2	4	2"x 3/16" x 1'-4" x 0'-8"	ST 400
DAMPING SADDLE	DUS-4	2	3/8" x 3/8" x 3'-4"	ST 298
	DUS-3	1	3/8" x 3/8" x 2'-8"	ST 298
CONNECTION BAR	CB1	1	1" x 1'-3"	ST 400
	CB2	1	3/4" x 1'-3"	ST 400
	CB3	6	1" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	1/2" x 1'-6"	ST 400
	P2	1	4" x 1'-4" x .29" x 0'-8"	ST 400
	P3	1	4" x 1'-4" x .39" x 1'-0"	ST 400
	P5	3	4" x 1'-4" x 3/4" x 1'-6"	ST 400
	P6	1	4" x 1'-4" x .34" x 0'-9"	ST 401
"B" SHEAR CONNECTOR	SA2	6	1" ø REBAR x 0'-6"	ST 416
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 1/4" x 0'-8"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/16" x 1" FULL THROAT FILLET.







NO.	DATE	REVISION	BY
1	8-18-69	AS NOTED	G.D.C

⚠ REF. DRWGS.

7-A82 SHEET	7-22-68
7-A83-11	10-15-68
7-A84-31	1-3-69
7-A84-13 & 18,39	7-12-68
7-A84-42 & 3	10-15-68
SS-124	1-6-69
7-A81-3	7-22-68
7-A81-6,7 & 8	7-22-68

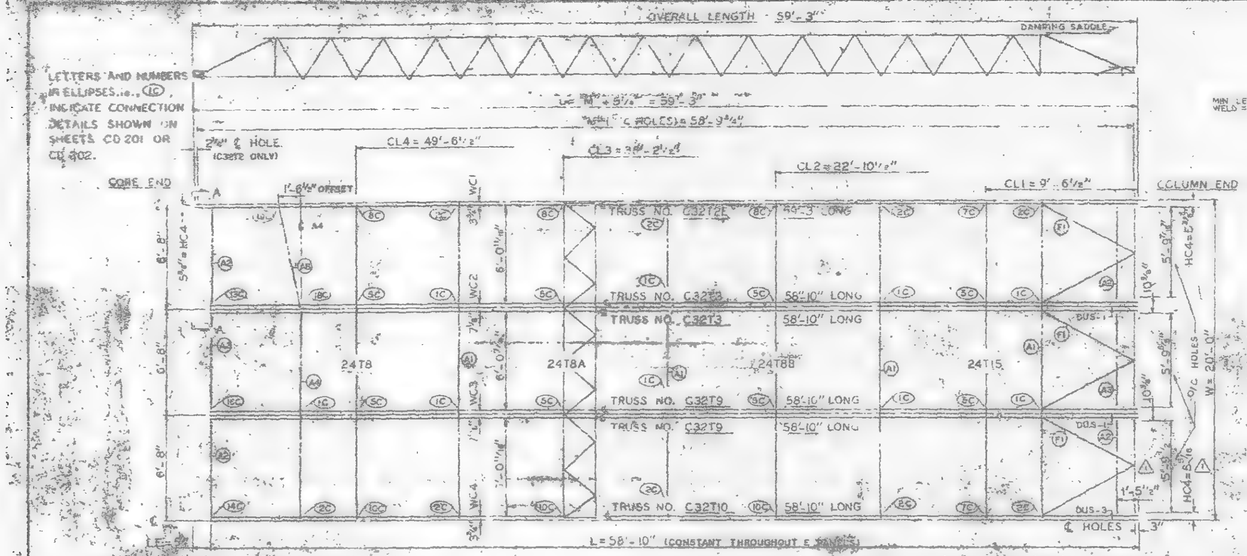
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91, 93-106 (S)
PANEL E1C - 20' x 59'-8"

BLDG. B FLOORS 50-58, 60-74, 79-91, 93-106 (S) TYP.

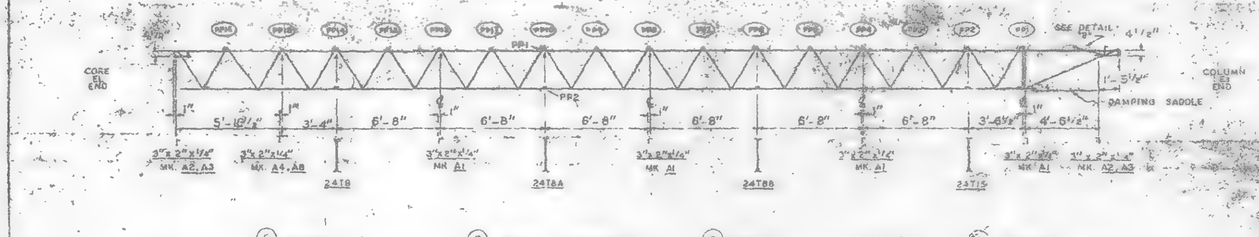
FABRICATION BY LACLEDE STEEL COMPANY

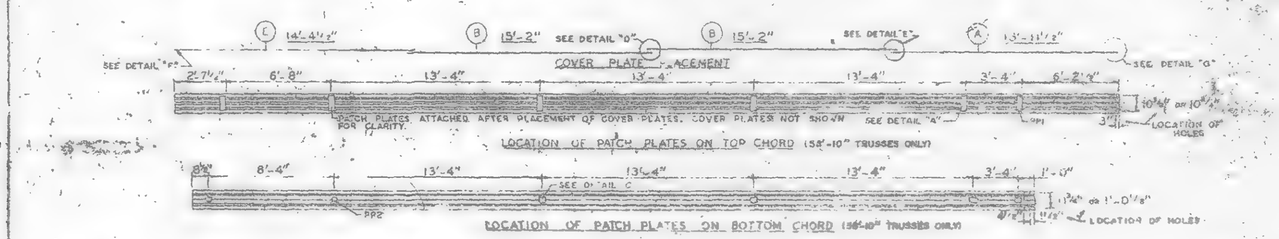
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-6	PLATE
APPROVED FOR FABRICATION BY N.Y.P.A.	DATE	DRAWN BY GD DATE NOV. 1 1968	
ROUTED FOR FABRICATION BY	DATE	CHECKED BY E.M.CHAIRS IN CHARGE OF PRODUCTION DATE NOV. 4 1968	
RELEASED FOR FABRICATION BY	DATE	FABRICATION CONT. NO W.T.C. 221	SHEET NO. E1C

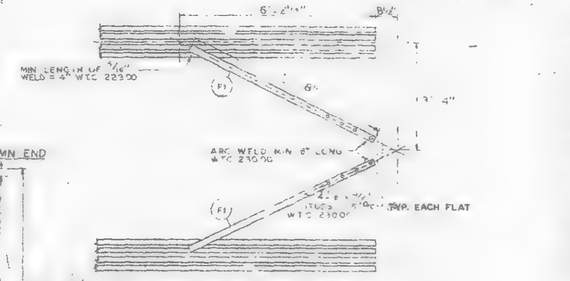


PANEL NO. E1E SIZE 20' x 59'-3"

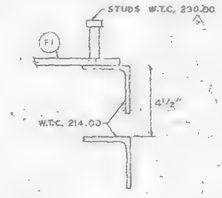
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 205, CD 208 & CD 207 RESPECTIVELY.







TYPICAL PLAN OF TOP CHORD COLUMN END, DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

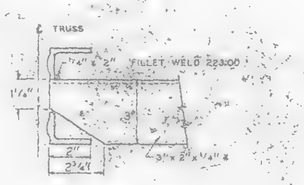


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DWGS
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T2E	1	C32T2E - 59'-3"	ST 202E
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST
SHORTENED TRUSSES	T8	1	24T8 - 19'-1"	ST 8
	T8A	1	24T8A - 19'-1"	ST 8A
	T8B	1	24T8B - 19'-1"	ST 8B
	T15	1	24T15 - 14'-11"	ST 15
3"x 2"x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 1'-3"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-7 1/2"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
	A4	1	3" x 2" x 1/4" x 2'-7 1/2"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-0 3/8"	ST 403
DIAGONAL FLATS	F	6	1" x 7" x 1'-8"	ST 403
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	8	9" x .0138" x 15'-3"	ST 303
	C	3	9" x .0135" x 14'-6 1/2"	ST 303
ANGLE CLIPS	C1	20	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-0"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/16" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	12	1" ø x 1'-3"	ST 400
	CB2	5	1" ø x 1'-3"	ST 400
	CB3	8	1" ø x 1'-4"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 6"	ST 400
	P2	1	4 1/2" x 3/8" x 0'-8"	ST 400
	P3	1	4 1/2" x 3/8" x 0'-10"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-6"	ST 400
	P6	1	4 1/2" x 3/8" x 0'-10"	ST 401
3/4" ø SHEAR ANCHOR	SA2	6	3/4" ø REBAR x 0'-4"	ST 400
PATCH PLATES	PP1	18	2" x 1" x 0'-0"	ST 400
	PP2	18	3" x 2" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYD. 40CEN ROOT IN THE E-70 SERIES 5/32" DIAM.

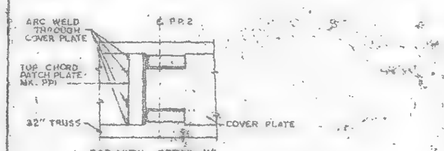
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" MIN. FILLET.

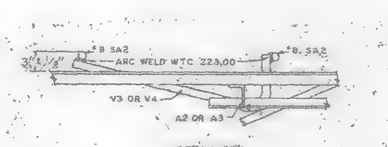


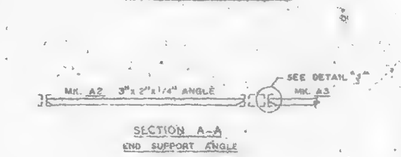
NO	DATE	REVISION	BY
2	8-18-69	AS NOTED	GDC
1	9-19-68	AS NOTED	T.M.C.

(2) REF. DRWGS.

T-AB3	1-2-68
T-AB3-1	10-15-68
AB8	1-3-69
T-AB4	1-2-69
T-AB4 #2 & 3	10-15-68
T-AB4	1-2-69
T-AB-3	1-24-68
T-AB1-6, 7 & 8	1-24-68







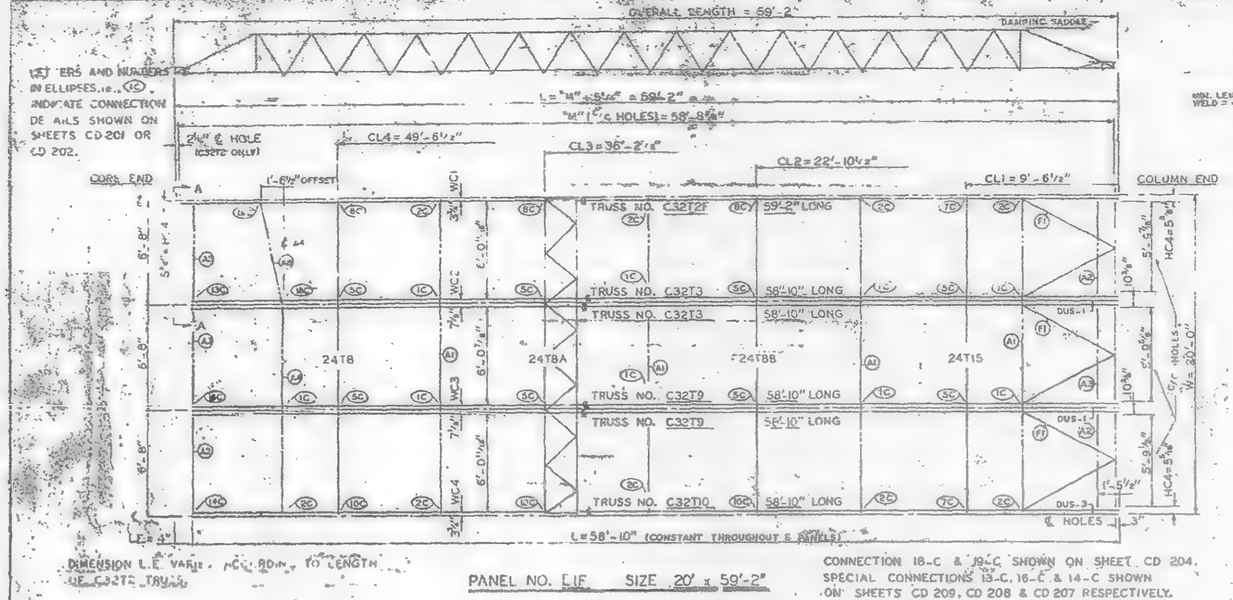
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)
69 (NORTH) PANEL E1E 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO T-AB3	PLATE
APPROVED FOR FABRICATION	DATE	DRAWN BY: gdc DATE JULY 22, 1968	
APPROVED FOR FABRICATION	DATE	CHECKED BY: T.M. CHURA DATE REV 22, 1968	W. CHARGE CL
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO WTC 221	SHEET NO FP E1E

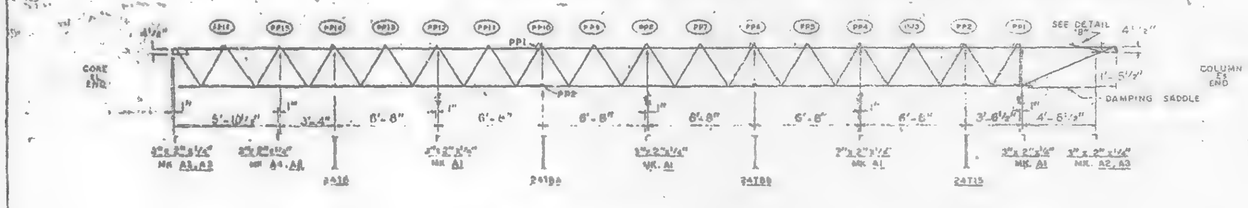
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

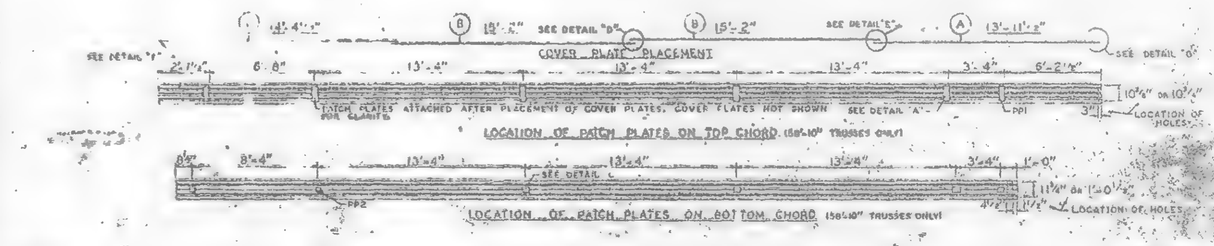


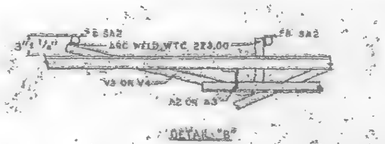
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

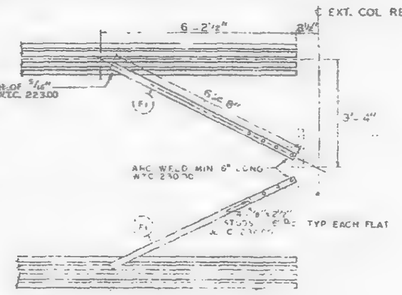
PANEL NO. E1F SIZE 20' x 59'-2"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

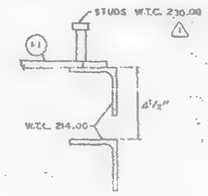








TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.I.C. 223.00

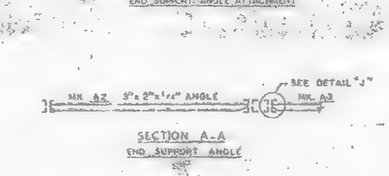


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	SHAPE
FLOOR TRUSSES	T2F	1	C32T2F - 59'-2"	ST 202F
	T2	2	C32T2 - 58'-10"	ST 202
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 58'-10"	ST 8
	T8A	1	24T8A - 58'-10"	ST 108A
	T8B	1	24T8B - 58'-10"	ST 108
	T15	1	24T15 - 58'-10"	ST 115
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 10'-10"	ST 402
	A2	4	3" x 2" x 1/4" x 5'-8"	ST 402
	A3	2	3" x 2" x 1/4" x 5'-10"	ST 402
	A4	1	3" x 2" x 1/4" x 4'-8"	ST 402
DIAGONAL FLATS	F	6	1/2" x 7" x 15'-8"	ST 401
COVER PLATES	A	3	9" x 0.135" x 13'-10"	ST 303
	B	8	9" x 0.135" x 15'-2"	ST 303
	E	3	9" x 0.135" x 14'-6 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 1/2" x 3 1/16" x 0'-8"	ST 400
	C2	4	2" x 1/2" x 3 1/16" x 1'-8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3" x 1/2" x 3'-0"	ST 298
	DUS-3	1	3 1/2" x 3" x 1/2" x 3'-8"	ST 298
CONNECTION BAR	CB1	1	1/2" x 4" x 3'-0"	ST 400
	CB2	8	1/2" x 4" x 3'-0"	ST 400
	CB3	6	1/2" x 4" x 5'-0"	ST 400
CONNECTION PLATES	PP1	5	3/4" x 1'-6" x 2'-1"	ST 400
	PP2	1	4" x 1'-3" x 5'-0"	ST 400
	PP3	1	4" x 1'-3" x 5'-0"	ST 400
	PP5	1	4" x 1'-3" x 4'-6"	ST 400
	PP6	1	4" x 1'-3" x 3'-6"	ST 400
3/8 SHEAR ANCHOR	SA2	8	3/8" ø SHEAR x 3'-0"	STUD
PATCH PLATES	PP1	18	2" x 1'-7 1/2" x 0'-9"	ST 400
	PP2	18	3" x 3/4" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR DUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



NO	DATE	REVISION	BY
1	6-18-69	AS NOTED	GDC

⚠ REF. DRWGS.

7-A82-24	7-22-68
7-A83-11	10-15-68
7-A84-1, B1	1-3-68
7-A84-18 & 18.30	7-22-68
7-A84-42 & 3	10-15-68
SA-124	1-6-69
7-A81-3	7-22-68
7-A81-6.7 A8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48, 70-71 (N)

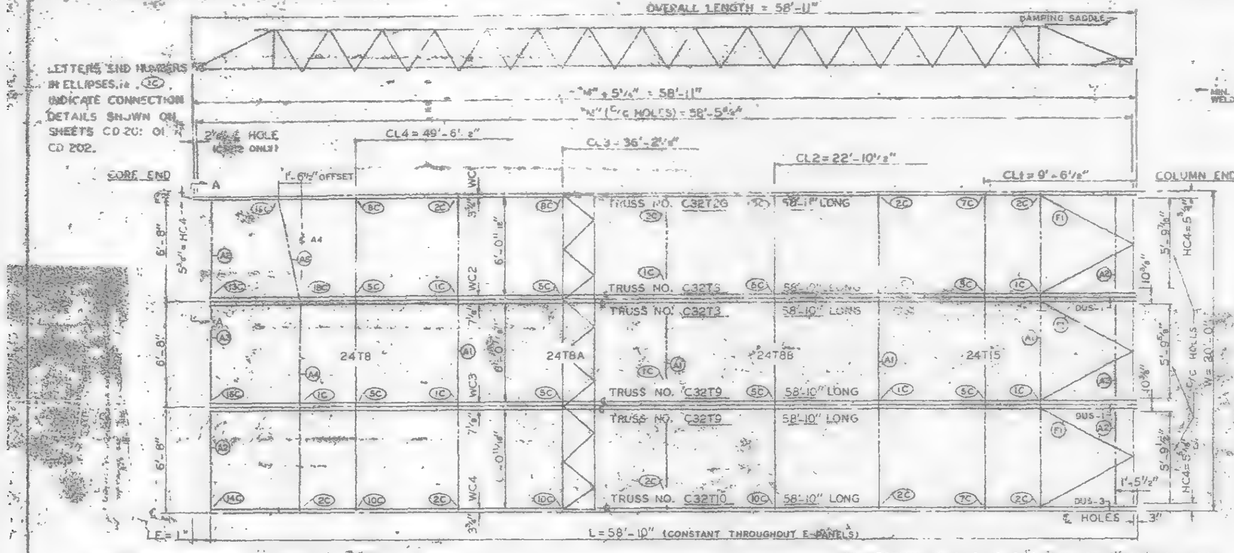
PANEL E1E - S

BLDG. B FLOORS 47-48, 70-71 (WEST) ⚠

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A82-24	PLATE
APPROVED FOR FABRICATION BY	DATE 11-7-68	DRAWN BY GDC DATE NOV. 1, 1968	
APPROVED FOR FABRICATION BY	DATE	CHECKED BY TMC/MJM DATE 11-6-1968	IN CHARGE PROJ. ENG.
DETAILED BY A. CARLSON		FABRICATION CODE NO. 221	SHEET NO. FD E1F

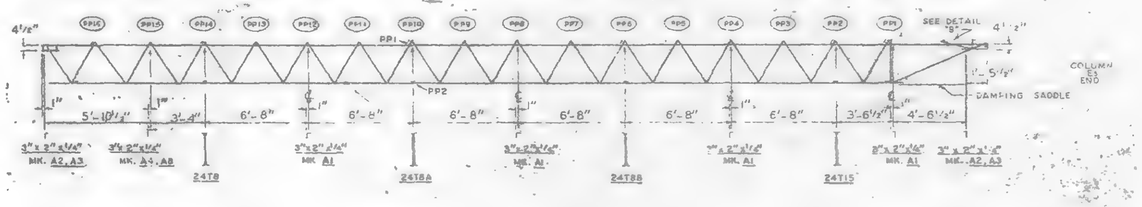
LETTERS AND NUMBERS IN ELLIPSES, ie. (2C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 205 OR 206 & CD 202.

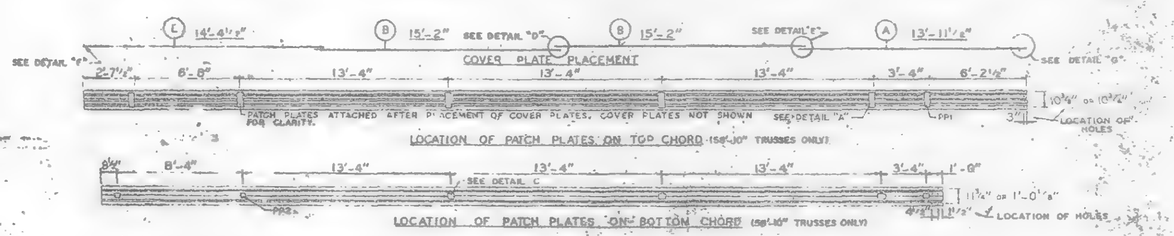


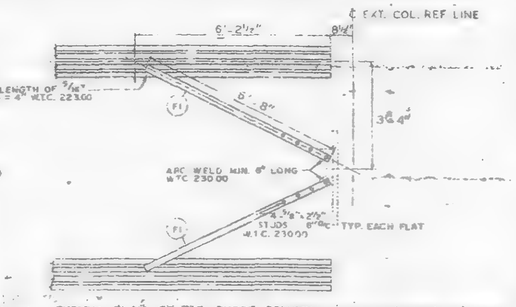
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TYP.

PANEL NO. E1G SIZE 20' x 58'-11"

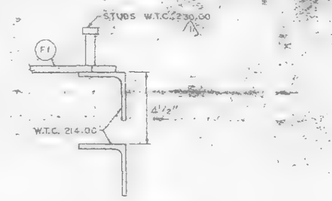
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.







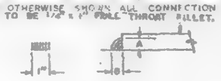
TYPICAL PLAN OF TOP CHORD-COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.I.C. 228.00

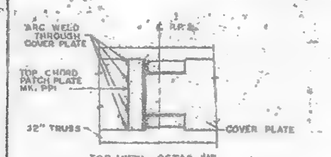


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

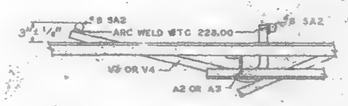
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	SPEC. GRADE
FLOOR TRUSSES	T2G	1	C32T2G - 58'-11"	ST 250
	T3	2	C32T3 - 58'-10"	ST 250
	T9	2	C32T9 - 58'-10"	ST 250
	T10	1	C32T10 - 58'-10"	ST 250
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 250
	T8A	1	24T8A - 19'-11"	ST 250
	T8B	1	24T8B - 19'-11"	ST 250
	T15	1	24T15 - 19'-11"	ST 250
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 400
	A2	4	3" x 2" x 1/4" x 5'-11 1/2"	ST 400
	A3	2	3" x 2" x 1/4" x 5'-11 1/2"	ST 400
	A4	1	3" x 2" x 1/4" x 19'-3"	ST 400
	A8	1	3" x 2" x 1/4" x 6'-3"	ST 400
DIAGONAL FLATS	F1	6	1 1/2" x 3/8" x 6'-8"	ST 402
COVER PLATES	A	3	8" x .0135" x 13'-11 1/2"	ST 303
	B	8	8" x .0135" x 15'-2"	ST 303
	E	3	8" x .0135" x 14'-6 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 1 1/2" x 1 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-2	2	3/16" x 3 1/4" x 2'-0" x 3 7/16"	ST 298
	DUS-3	1	3/16" x 3 1/4" x 2'-1" x 3 5/16"	ST 298
CONNECTION BAR	CB1	1	1" x 6" x 1'-3"	ST 400
	CB2	6	1/2" x 8" x 1'-3"	ST 400
	CB3	8	1/2" x 6" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3/16" x 3 1/8" x 1'-1 1/2"	ST 400
	P2	1	4'-3" x .39" x 0'-8"	ST 400
	P3	1	4'-3" x .39" x 1'-0"	ST 400
	P5	3	4'-3" x 1/4" x 1'-6"	ST 400
	P6	1	4'-3" x .39" x 2'-9"	ST 400
3/8" SHEAR ANCHOR	SA2	6	3/8" ø REBAR x 0'-4"	ST 40 C
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-8"	ST 400
	PP2	18	3" x 2 1/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYD. ELECTRODES IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FILLET THROAT FILLET.

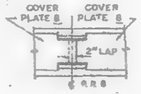




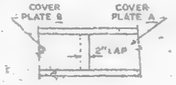
TOP VIEW - DETAIL "A"



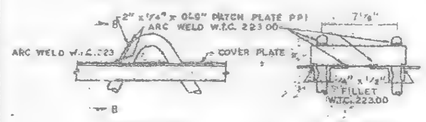
DETAIL "B"



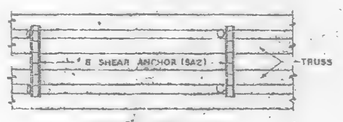
DETAIL "D"



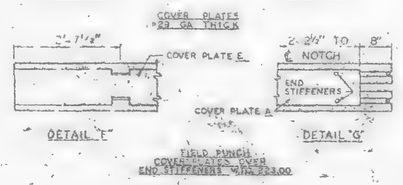
DETAIL "E"



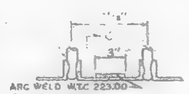
DETAIL "A" SECTION B-B



TOP VIEW - DETAIL "B"

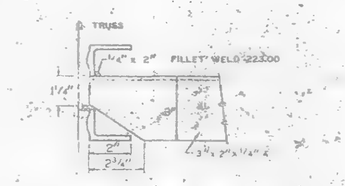


DETAIL "F" DETAIL "G"



DETAIL "C"

SECTION C-D



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

NO	DATE	REVISIONS	BY
1	6-18-69	AS NOTED	GT

REF. DRWGS.

7-A9R-3&10	7-22-68
7-A83-11	10-15-68
7-A84-3,1	1-3-68
7-A84-15 & 15-38	7-22-68
7-A84-42 & 3	10-15-68
86-124	1-6-69
7-A81-3	7-22-68
7-A81-6,7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

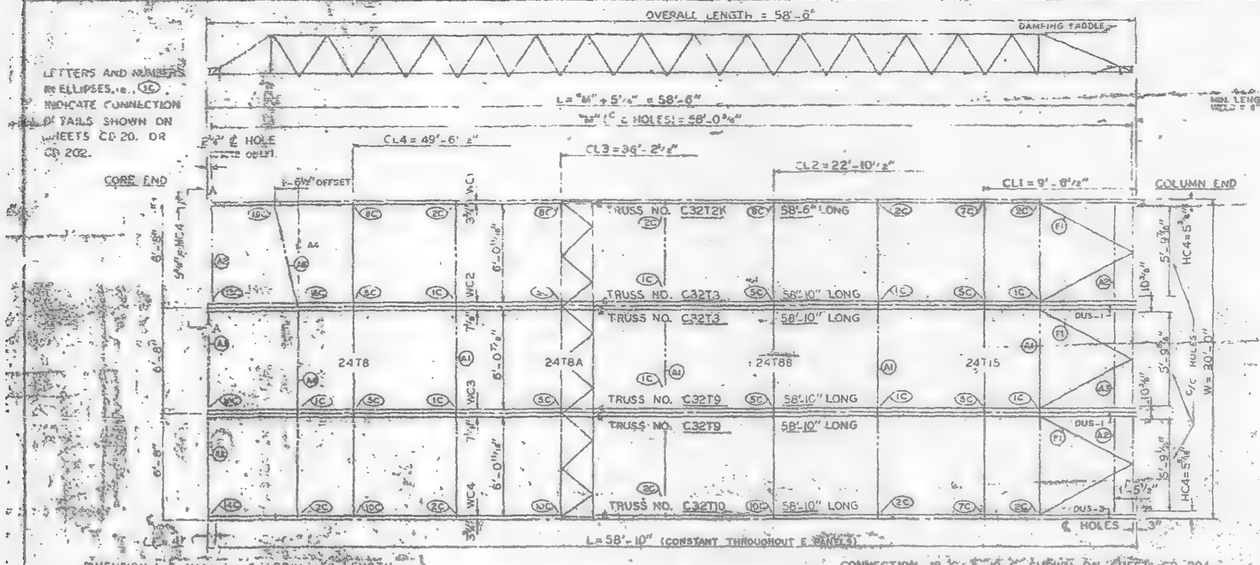
BLDG. A FLOORS 39-40 (N&S) PANEL E1G - 20' x 58'-11"

BLDG. B FLOORS 39-40 (EAST & WEST) "

FABRICATION BY : LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A8B-11	PLATE
APPROVED FOR FABRICATION BY FOR P.O.N.Y.A	DATE 11/4/68	DRAWN BY gds DATE NOV. 1 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUDA DATE NOV. 4 1968	IN CHARGE OF PROJ. [illegible]
DETAILED BY [illegible]		FABRICATION CONT. NO. W.I.C. 221	SHEET NO. FE E1G 1

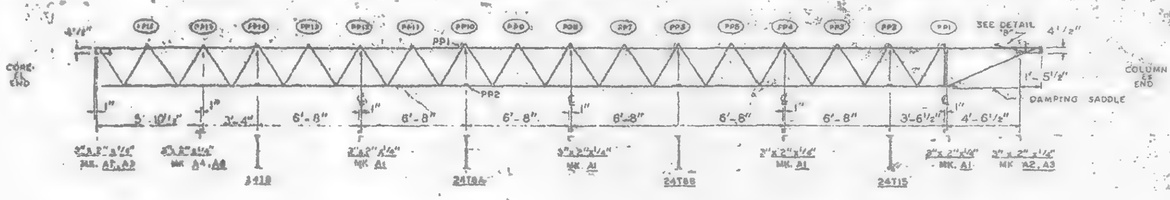
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 20. OR CD 202.

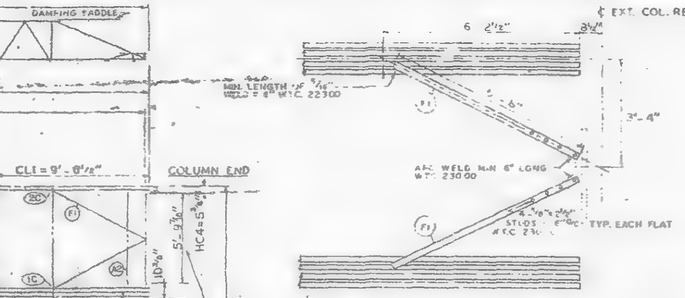


DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

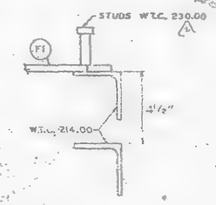
PANEL NO. E1K SIZE 20' x 58'-6"

CONNECTION 1B-C, 1C-C & 1D-C SHOWN ON SHEET CD 204
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

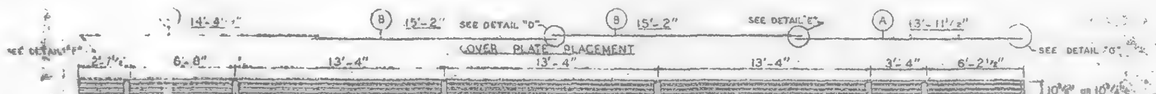


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL					
MATERIAL	MK	QTY	SIZE		WT
FLOOR TRUSSES	T2K	1	32T2K 58'-9		3T 2F2K
	T3	2	C32T3 58'-10"		1T
	T9	2	C32T9 58'-10"		1T
	T10	1	32T10 58'-10"		1T
BRIDGING TRUSSES	TBA	1	24T8A 12'-0"		81 LB
	TBB	1	24T8B 12'-0"		81 LB
	T15	1	24T15 12'-0"		81 LB
3"x 2"x1/4" ANGLE	A1	4	3" x 2" x 1/4" x 5'-10"		1T 1
	A2	4	3" x 2" x 1/4" x 5'-10"		3T 0
	A3	2	3" x 2" x 1/4" x 5'-10"		1T 1
	A4	2	3" x 2" x 1/4" x 6'-0"		1T 1
	A8	1	3" x 2" x 1/4" x 6'-0"		0T 1
DIAGONAL FLATS	F1	6	12" x 3/8" x 6'-3"		1T 1
COVER PLATES	A	3	9" x 0.135" x 15'-0"		5T 1
	B	6	9" x 0.135" x 14'-0"		5T 1
	E	3	0" x 0.239" x 14'-0"		3T 3
ANGLE CLIP	C1	20	2" x 1/4" x 1 1/2" x 0'-8"		3T 4
	C2	4	2" x 1/4" x 1 1/2" x 6"		0T 4
DAMPING SADDLE	DUS-1	2	3" x 1/2" x 3 1/2" x 3'-0"		5T 2
	DUS-3	1	3" x 1/2" x 3 1/2" x 6'-3"		3T 2
CONNECTION BAR	CB1	1	1" x 6" x 1'-3"		8T 4
	CB2	4	1" x 6" x 1'-3"		3T 4
	CB3	6	1" x 6" x 1'-3"		4T 1
CONNECTION PLATES	P1	3	1" x 12" x 2'-0"		3T 4
	P2	1	1" x 12" x 2'-0"		1T 4
	P3	1	1" x 12" x 2'-0"		1T 4
	P5	3	1" x 12" x 2'-0"		3T 4
	P6	1	1" x 12" x 2'-0"		1T 4
"B" SHEAR ANCHOR	SA2	6	3/4" A REBAR x 0'-8"		7 4
PATCH PLATES	PP1	16	8" x 1/4" x 2'-0"		5T 4
	PP2	16	3" x 1/4" x 0'-8"		2T 4

(1) ALL ARC WELD TO BE MADE WITH LOW HYD. E 70 XX RODS IN THE E-70 SERIES OR EQUAL.

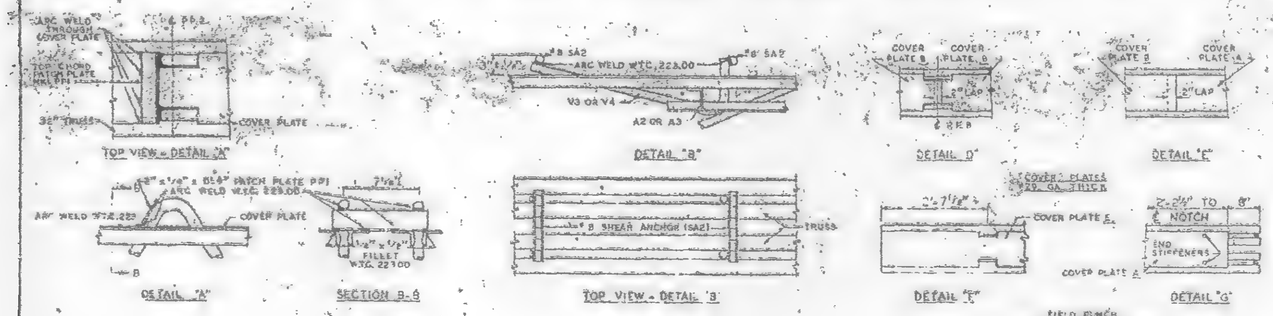
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" PERIPHERAL FILLET.

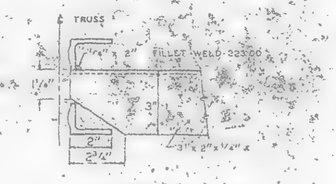


COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

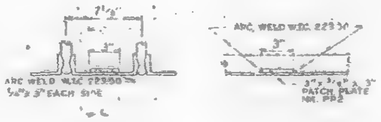
LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)





DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE



NO	DATE	
1	6-18-69	AS NOTED

REF. DRWGS.

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

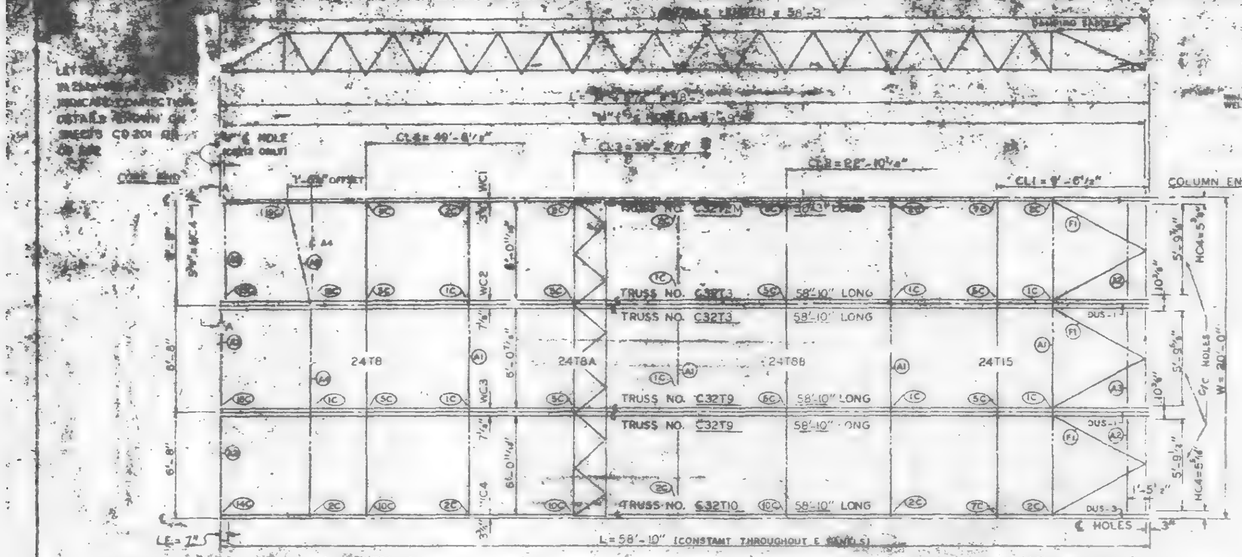
BLDG. A FLOORS 46 (N). PANEL E1K - [illegible]

BLDG. B FLOORS 48 (WEST) ⚠

FABRICATION BY ACME STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS — DATE — DESIGN NO. L A82-01 — DR. BY — DATE — CHECKED BY — DATE NOV 4 1968 — SCALE — SHEET NO. 221 — DETAILED BY — DRAWING NO. E1K

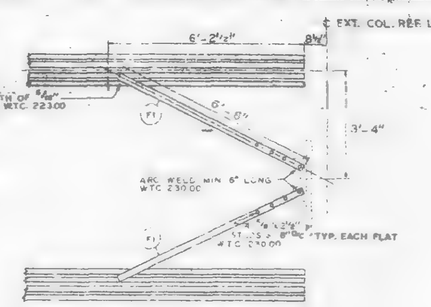
APPROVED FOR FABRICATION BY — DATE — APPROVED FOR RELEASE FOR FABRICATION BY — DATE



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1M SIZE 20' x 58'-3"

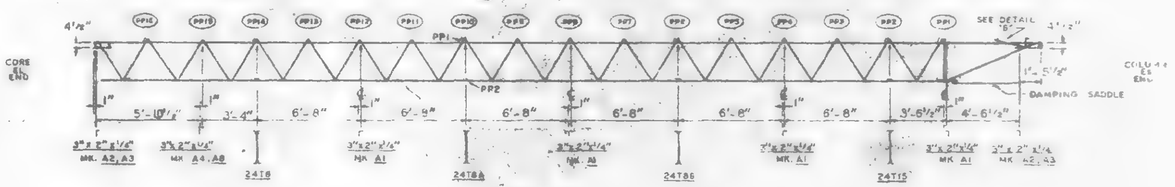
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

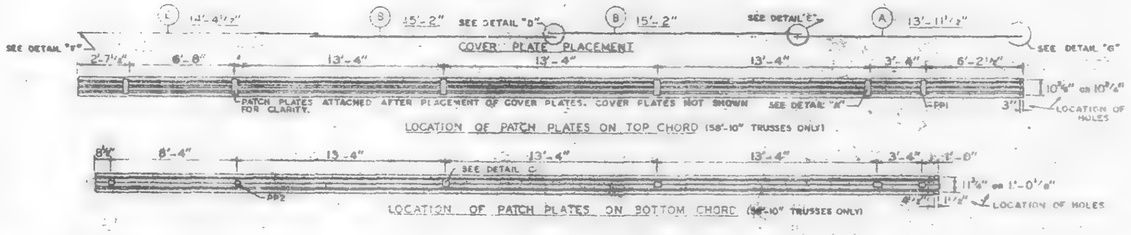


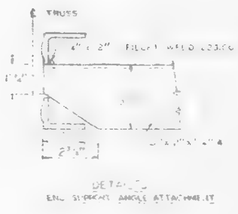
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T2M	1	C32T2M - 58'-3"	ST 202 M
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3"x 2½"x¼" ANGLE	A1	4	3"x 2½"x¼" x 19'-11"	ST 403
	A2	4	3"x 2½"x¼" x 6'-11"	ST 403
	A3	2	3"x 2½"x¼" x 9'-11"	ST 403
	A4	1	3"x 2½"x¼" x 13'-3"	ST 403
	A8	1	3"x 2½"x¼" x 6'-11"	ST 403
DIAGONAL FLATS	F1	6	1½" x ⅜" x 6'-8"	ST 402
COVER PLATES	A	3	9" x .0359" x 19'-11"	ST 903
	B	6	9" x .0359" x 19'-2"	ST 903
	E	3	9" x .0359" x 16'-8½"	ST 903
ANGLE CLIP	C1	20	4"x 4"x ¼" x 0'-8"	ST 400
	C2	4	2½" x 1⅛" x 1'-3" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3½" x 7½" x ¼" x 3'-6½"	ST 298
	DUS-3	1	3½" x 3½" x ⅜" x 5'-6½"	ST 298
CONNECTION BAR	CB1	1	1" Ø x 1'-3"	ST 400
	CB3	6	¾" Ø x 1'-9"	ST 400
	CB2	8	1⅛" Ø x 1'-9"	ST 400
CONNECTION PLATES	P1	5	3½" x ⅜" x 6'-½"	ST 400
	P2	1	4'-½" x .39" x 1'-0"	ST 400
	P3	1	4'-½" x .39" x 1'-0"	ST 400
	P5	3	4'-½" x ⅜" x 1'-8"	ST 400
	P6	1	4'-½" x .39" x 6'-9"	ST 401
"B" SHEAR ANCHOR	SA2	6	¾" Ø REBAR x 0'-8"	ST 414
PATCH PLATES	PP1	18	2"x 1'-4" x 0'-9"	ST 400
	PP2	18	3"x 3⅛" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. MODERN RODS IN THE E-70 SERIES OR BTTER.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FILLET THROUGHOUT.



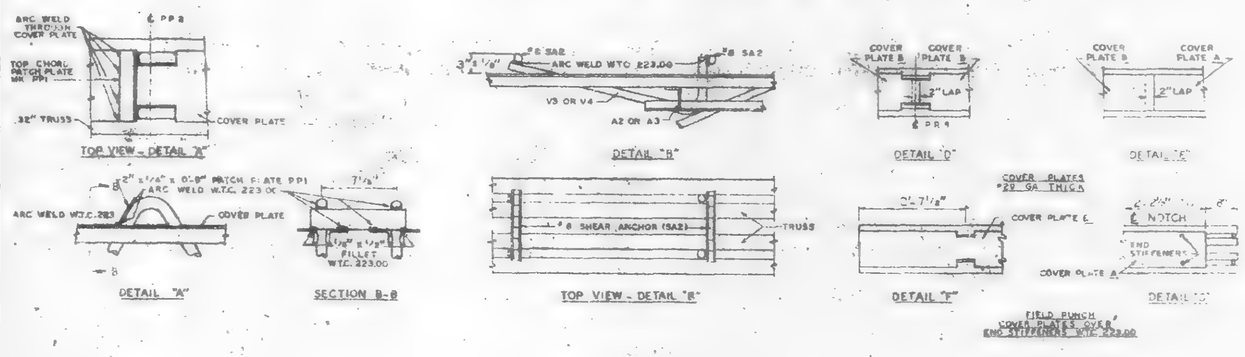




NO.	DATE	REVISION	BY
1	5-18-68	AS NOTED	G.O.C.

REF. DRWGS.

7-AB2-1 & 2	7-12-68
7-AB3-1	10-15-68
7-AB4-3,1	7-8-68
7-AB4-15 & 16-3	7-12-68
7-AB4-42 & 3	10-15-68
SA-124	1-8-69
7-AB1-3	7-22-68
7-AB1-6,7 & 8	7-22-68

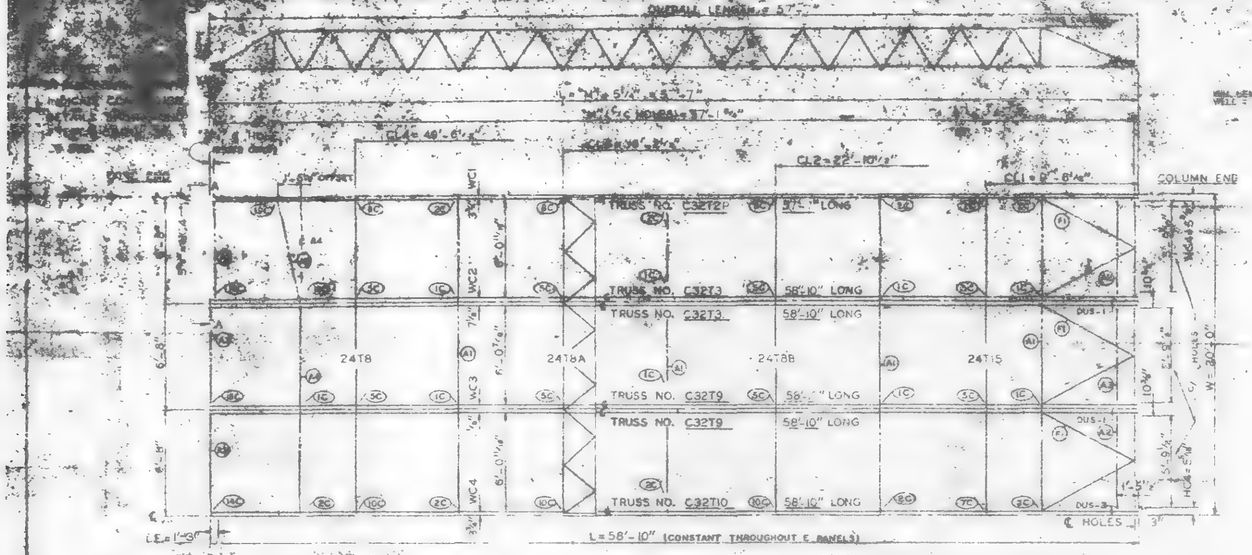


FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)

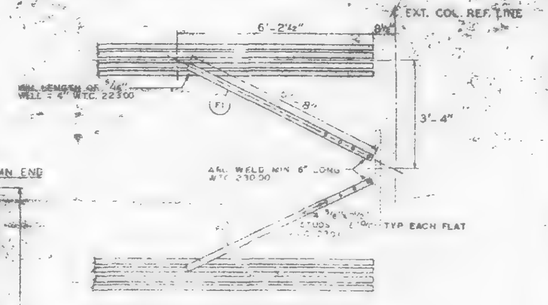
BLDG. B FLOORS 72-73 (WEST)

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO.	7-AB2-1
APPROVED FOR FABRICATION BY	FOR P.O.N.Y.A.	DATE	7/3/68
DRAWN BY	GJC	DATE	NOV. 1, 1968
CHECKED BY	T.M.CHUSA	DATE	NOV. 4, 1968
APPROVED FOR FABRICATION BY	FOR FABRICATOR	DATE	
DETAILED	LACLEDE STEEL CO.	FABRICATION CONT. NO. W.T.C.	221



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

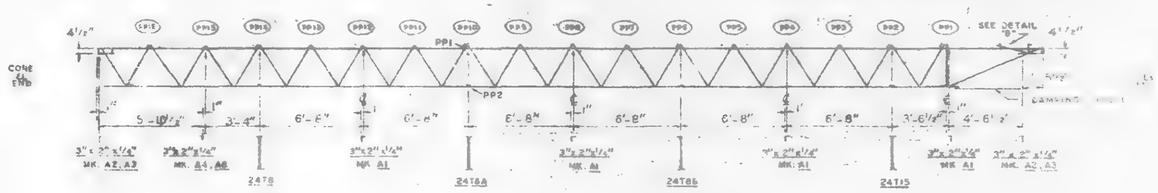
PANEL NO. E1P SIZE 20' x 57'-7"

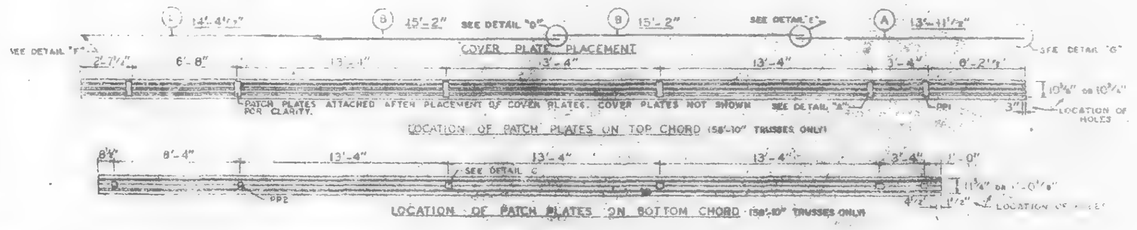


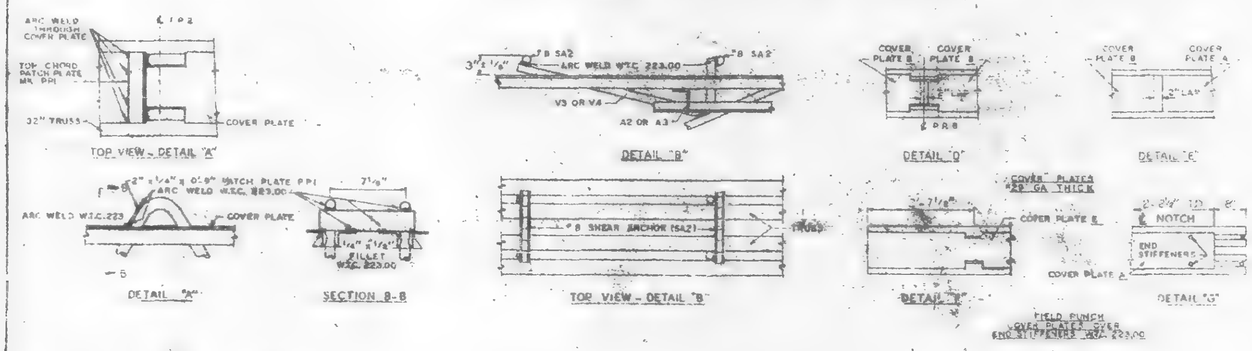
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T2P	1	C32T2P - 58'-10"	ST 202
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 208
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 18'-11"	ST 208
	T8A	1	24T8A - 18'-11"	ST 208A
	T8B	1	24T8B - 18'-11"	ST 208B
	T15	1	24T15 - 18'-11"	ST 215
3"x 2"x 1/4" ANGLE	A1	4	3"x 2"x 1/4" x 18'-11"	ST 403
	A2	4	3"x 2"x 1/4" x 8'-11"	ST 403
	A3	2	3"x 2"x 1/4" x 8'-11"	ST 403
	A4	1	3"x 2"x 1/4" x 13'-3"	ST 403
	A8	1	3"x 2"x 1/4" x 6'-2"	ST 403
DIAGONAL FLATS	F1	6	1'-8"x 3/4"x 8'-8"	ST 405
COVER PLATES	A	2	8"x 0.135"x 13'-11"	ST 208
	B	8	8"x 0.135"x 18'-2"	ST 208
	L	3	8"x 0.135"x 14'-6"	ST 208
ANGLE CLIP	C1	20	2"x 2"x 1/4" x 0'-8"	ST 400
	C2	4	2"x 2"x 1/4" x 6"	ST 400
CAMPING SADDLE	DUS-2	2	3"x 3"x 5/16"x 3'-7"	ST 208
	DUS-3	1	3"x 3"x 5/16"x 5'-5"	ST 208
CONNECTION BAR	CB1	1	8 x 1'-3"	ST 400
	CB2	4	8 x 1'-0"	ST 400
	CB3	6	8 x 1'-8"	ST 400
CONNECTION PLATES	F1	5	3"x 8" x 8"	ST 400
	F2	1	4"x 8"x 1'-9"	ST 400
	F3	1	4"x 8"x 1'-0"	ST 400
	F5	3	4"x 8"x 8'-6"	ST 400
	PF	1	4"x 8"x 2'-9"	ST 401
8" SHEAR ANCHOR	SA2	6	8" SHEAR x 0'-6"	ST 400
	SA3	18	2"x 4"x 0'-9"	ST 400
PATCH PLATES	PP2	18	3"x 7/8"x 0'-3"	ST 400

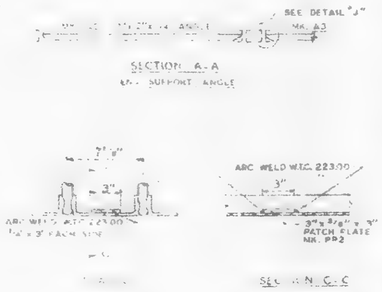
(1) ALL ARC WELD TO BE MADE WITH LOW HY. 40CEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.









NO.	DATE	REVISION	BY
1	9-18-68	AS NOTED	G.G.C.

PER DRWGS.

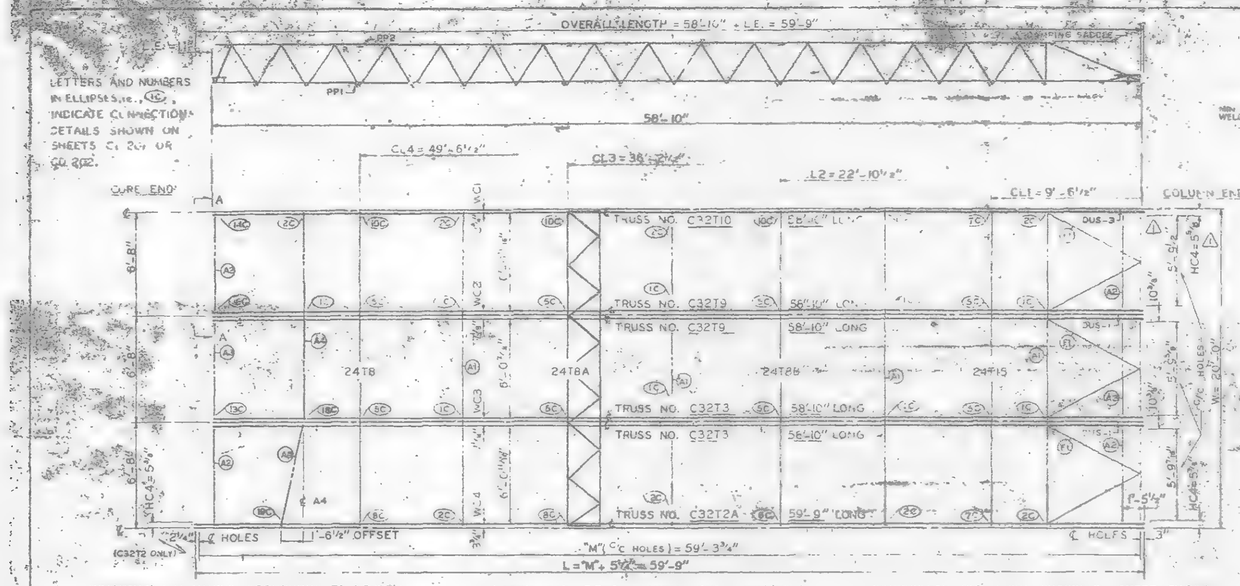
7-AB2-3 & 10	7-12-68
7-AP1-11"	7-15-68
7-AB4-	7-15-68
7-AP4-15" & 18"	7-15-68
7-AB4-12 & 13	7-12-68
58-124	6-10
7-AB1-3	7-12-68
2-AB1-9,7 A8	7-12-68

FLOOR PANEL DETAILS
FOR
AIR TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 74 (N)
PANEL SIZE
BLDG. B FLOORS 74 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

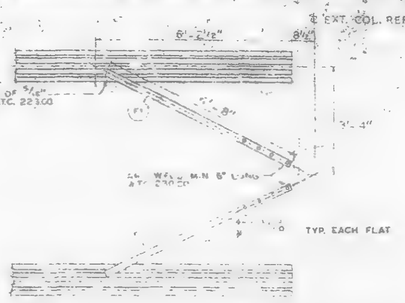
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB2-1	SHEET
APPROVED FOR FABRICATION FOR PORT AUTHORITY	DATE	DRAWN BY: G.G.C. DATE NOV. 1 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.H.C./H.R.A. DATE NOV. 4 1968	IN CHARGE OF PROJ.
INSTALLED BY A. CARL BOLICH, INC.		FABRICATION CONT. NO. W.O. 2211	SHEET CD 201



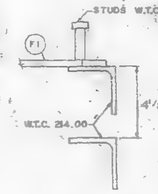
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E41A SIZE 20' x 59'-9"

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP C-CORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

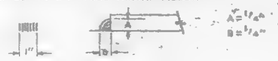


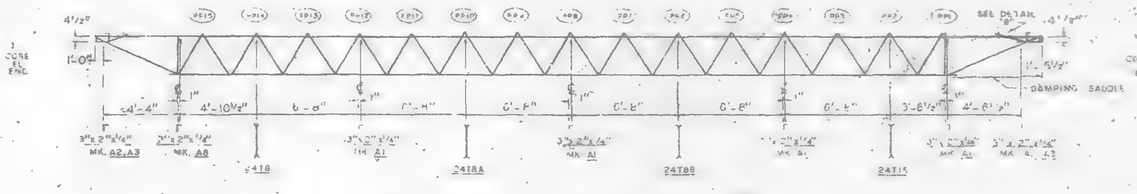
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 6 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

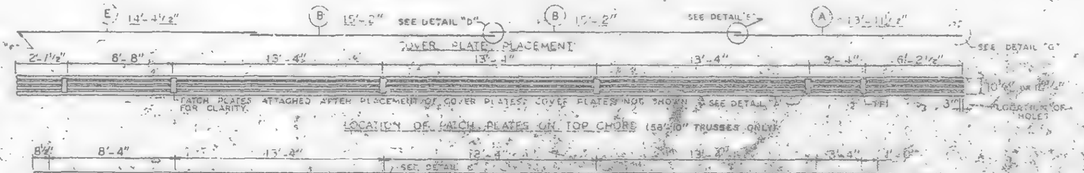
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	PCS	SIZE	REF. DRWG
FLOOR TRUSSES	T2A	1	C32T2A - 59'-0"	ST 206A
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	2	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3", 2"x3 1/2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 5'-1 1/2"	ST 401
	A2	4	3" x 2" x 1/4" x 5'-1 1/2"	ST 401
	A3	2	3" x 2" x 1/4" x 5'-1 1/2"	ST 401
	A4	1	3"x2" x 1/4" x 13'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 2'-8 1/2"	ST 435
DIAGONAL FLATS	F1	6	11 1/2" x 5 1/8" x 1/8"	ST 402
COVER PLATES	A	3	0" x 0'-3 5/8" x 1'-11 1/2"	ST 403
	B	2	0" x 1'-3 5/8" x 1'-2"	ST 403
	E	3	0" x 0'-3 5/8" x 4'-4 1/2"	ST 403
ANGLE CLIPS	C1	20	2" x 2" x 1/4" x 0'-6"	ST 400
	C2	4	2" x 2" x 1/4" x 0'-6"	ST 400
DAMPING SADDLE	DUS-1	2	3" x 3" x 3/16" x 1'-6"	ST 208
	DUS-3	1	3" x 3" x 3/16" x 1'-6"	ST 208
CONNECTION BAR	CB	1	1" x 1/2" x 1'-3"	ST 400
	CB2	6	3/4" x 1/2" x 1'-3"	ST 400
	CB3	6	1/2" x 1/2" x 5"	ST 400
CONNECTION PLATES	P1	5	3" x 3" x 1/2" x 0'-6 1/2"	ST 400
	P2	1	4 1/2" x 3/8" x 0'-8"	ST 400
	P3	1	4 1/2" x 3/8" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-6"	ST 400
	P6	1	4 1/2" x 3/8" x 0'-8"	ST 401
3/8 SHEAR ANCHOR	SA2	8	3/8 HEAD x 0'-3"	ST 400
PATCH PLATES	PP1	16	2" x 4" x 0'-3"	ST 400
	PP2	18	3" x 3/8" x 0'-4"	ST 400

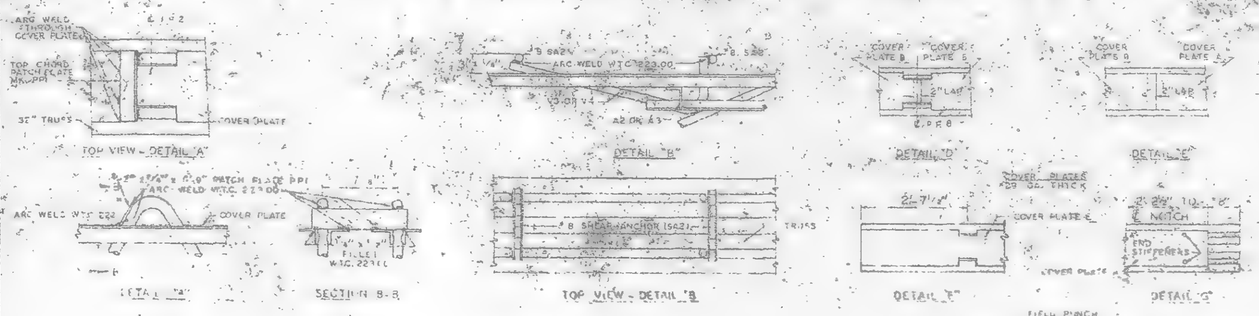
(1) ALL ARC WELD TO BE MADE WITH LOW HYD. ROPLEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.









NO.	DATE	REVISION	BY
1	6-9-68	AS NOTED	S.D.C.
2	9-10-68	AS NOTED	S.M.

REF DRWGS.

7-A82-1 & 10	2-68
7-A83-12	2-15-68
7-A84-2, 3 & 4	2-68
7-A84-15, 16 & 38	2-22-68
7-A84-23A & 24A	2-15-68
54-124	6-68
7-A91-3	2-22-68
7-A91-6, 7 & 8	2-22-68

FLOOR PANEL DETAILS

FOR

WORLD TRADE CENTER

PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24-26-38 (NORTH & SOUTH) 42-58-60 (SOUTH)

69 (NORTH) PANEL E41A

BLDG. B FLOORS 14-24-26-38 (EAST & WEST) 42-58

FABRICATED BY LACLEDE STEEL COMPANY

(2) MADISON, ILLINOIS

DESIGN DRAWING NO. W.T.C. E

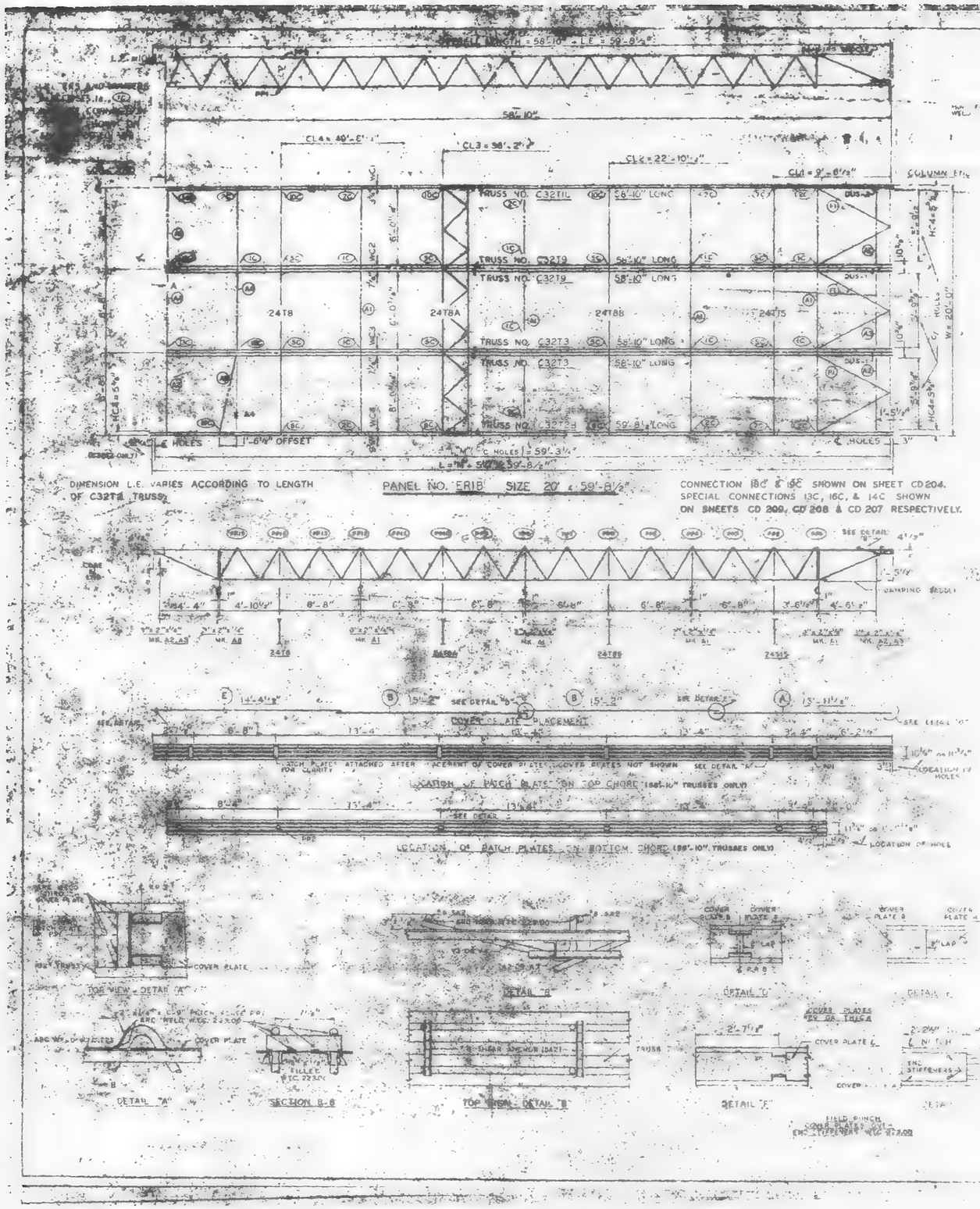
DRAWN BY G.K.

DATE JULY, 1968

CHECKED BY T.M.H. APPROVED BY

DATE JULY 22, 1968 REVISION NO.

W.T.C. 28 PANEL E41A



SECTION MATERIAL		PER PANEL		REF. DRWG.
MATERIAL	MK	QTY.	SIZE	
FLOOR TRUSSES	T2B	1	C32T2B - 59'-8½"	ST 2028
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T11	1	C32T11 - 58'-10"	ST 215
BRIDGING TRUSSES	T8	1	24T8 - 18'-1"	ST 208
	T8A	1	24T8A - 18'-11"	ST 208A
	T8B	1	24T8B - 18'-11"	ST 208B
	T15	1	24T15 - 12'-11"	ST 215
3"x 2"x¼" ANGLE	A1	6	3"x 2"x¼" x 14'-10"	ST 403
	A2	8	3"x 2"x¼" x 5'-11½"	ST 403
	A2A	2	3"x 2"x¼" x 5'-11½"	ST 403
	A4	1	3"x2"x¼" x 18'-3"	ST 403
	A8	1	3"x 2"x¼" x 21'-6"	ST 403
DIAGONAL FLATS	F1	6	11"x 8"x ⅜" x 6'-8"	ST 402
	A	3	8"x 0'-3 5/8"x 12'-11½"	ST 3'-3
	B	8	8"x 0'-3 5/8"x 18'-2"	ST 303
	C	3	8"x 0'-3 5/8"x 14'-6"	ST 303
ANGLE CLIPS	C1	20	3"x 3"x ¼" x 0'-8"	ST 400
	C2	4	3"x 3"x ¼" x 1'-4"	ST 401
CAMPING SADDLE	DLS-1	2	3"x 3"x ¼" x 1'-3"	ST 288
	DLS-2	1	3"x 3"x ¼" x 0'-3¾"	ST 288
CONNECTION BAR	CB1	1	¼" x 6" x 3'-3"	ST 400
	CB2	5	¼" x 6" x 2'-8"	ST 400
	CB3	8	¼" x 6" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	⅜" x 8" x 0'-8"	ST 400
	P2	5	⅜" x 4½" x 0'-8"	ST 400
	P3	1	⅜" x 6" x 1'-0"	ST 400
	P5	3	⅜" x 8" x 1'-4"	ST 400
	P8	1	⅜" x 6" x 0'-6"	ST 401
⅞" SHEAR ANCHOR	SA2	6	⅞" SHEAR x 0'-6"	ST 400
PATCH PLATES	PP	16	2" x ¼" x 0'-9"	ST 400
	PP2	18	3" x ⅜" x 0'-9"	ST 400

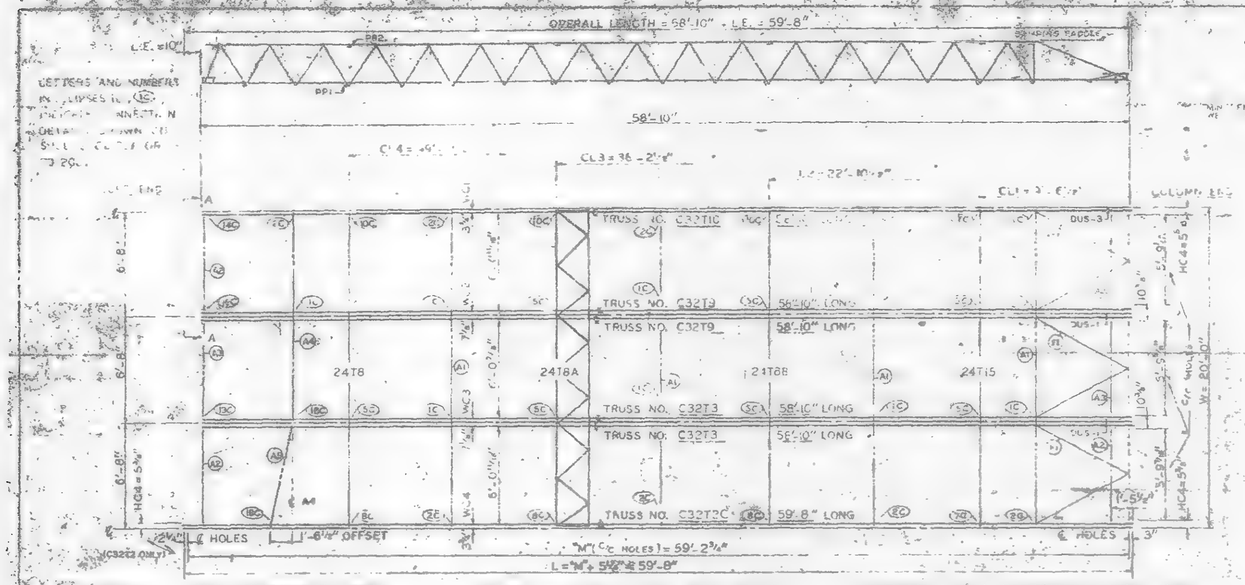
(1) ALL ARC WELD TO BE MADE WITH LOW HY. ELECTRODES IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 2" FULL THROAT FILLET.

NO	DATE	REVISION	BY
1	6-19-68	AS NOTED	

REF. DRAWGS.

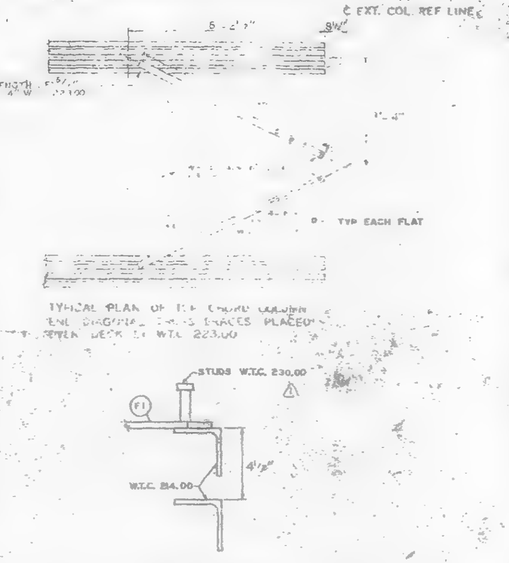
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N. YORK
FOR
PORT OF NEW YORK AUTHORITY
BLDG. A (SECTION 84-91, 93-105 INCL.)
PANEL F1B
BLDG. B FLOORS 84-91, 93-105 INCL.)
FABRICATION BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
DESIGN DRAWING NO. 1 A8312 SHEET NO. 15 OF
DRAWN BY
DATE NOV 5 68
CHECKED BY
DATE NOV 5 68
FABRICATION
W.T.C. 221
SCALE
PANEL F1B
LACLEDE STEEL CO.



DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIC SIZE 20' x 59'-8"

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY



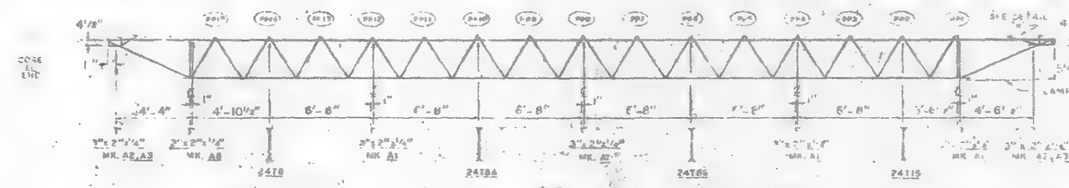
TYPICAL PLAN OF T.C. CHORD COLUMN END DIAGONAL TRUSS SPACES PLACED@ ROOF DECK LT. WT. 223.00

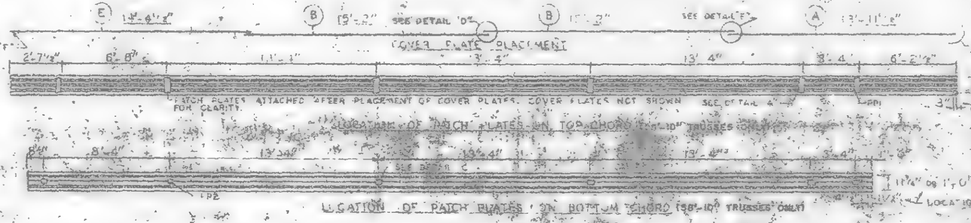
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

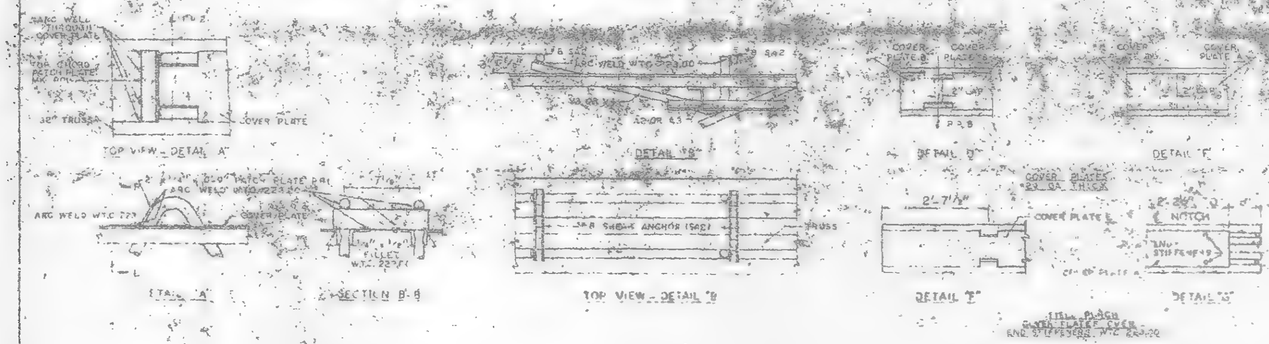
REQUIRED MATERIAL PER PANEL				
MATERIAL	MK	REQ	SIZE	
CHORDS	12C	1	C12X20.6	19'-8"
	13	1	L4X3½	58'-10"
	9	1	L3½X3½	58'-10"
	14C	1	L3½X3½	58'-10"
	P1	1	PL6"X	58'-10"
DIAGONAL TRUSSES	18A	1	PL5"X	58'-10"
	18C	1	PL5"X	58'-10"
	TYC	1	PL15"	58'-10"
3"x2"x¼" ANGLE	A2	4		
	A3	1		
	A4	1		
	A8	1		
CLIP ANGLE	F1	4	L4"x3½"x6"	
	F2	4	L4"x3½"x8"	
	L	3	6"x3½"x14.6#	
ANGLE CLIPS	C1	20	2"x2½"x5/16"x0'-8"	ST 400
	C2	4	2½"x2½"x5/16"x	ST 400
DAMPING SADDLE	DS-1	2	3½"x3½"x½"x3'-5"	ST 36
	DS-3	1	3½"x3½"x½"x0'-6"	ST 36
CONNECTION BAR	CB1	1	4"x	ST 400
	CB2	1	3½" x	ST 400
	CB3	6	1½" x	ST 400
CONNECTION PLATES	P1	5	3'-2"x8"x6"x	ST 400
	P2	1	4'-2"x 38"x0'-8"	ST 400
	P3	1	4'-2" x 38" x 0	ST 400
	P5	3	4'-2" x 38" x 0	ST 400
	P8	1	4'-2" x 38"x0'-8"	ST 400
⌀ SHEAR ANCHOR	A2	6	⌀" SHEAR x 0'-4"	ST 400
PATCH PLATES	PP1	18	2"x½"x 0'-8"	ST 400
	PP2	18	3"x½"x 0'-8"	ST 400

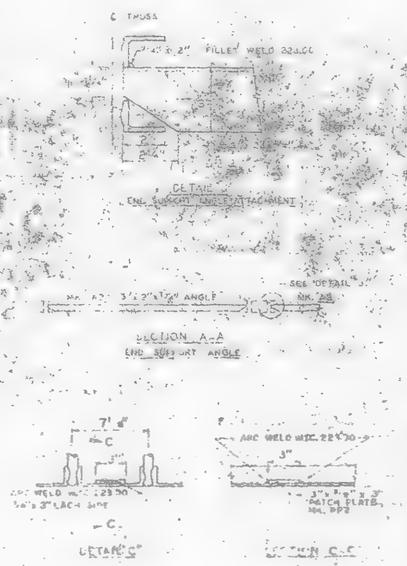
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.









NO	DATE	REVISION
4	6-19-69	AS NOTED

7-A10-15.10	2-22-68	
7-A55-12	10-4-68	
7-A84-21	3-1-68	
7-A94-19.16 & 38	12-22-68	
7-B84-47 & 3	10-4-68	
5A-24	1-6-69	
7-B81-3	7-22-68	
7-A81-6.7 & 8	12-22-68	

FLOOR PANEL DETAILS

AORL TRADE CENTER

PORT OF NEW YORK AUTHORITY

BLDG. A FLOOR 50-58, 60-68, 68-74, 80-91, 93-106 (S)

PANEL ERIC

BLDG. B FLOORS 50-58, 60-74, 80-91, 93-106 (S)

FABRICATION BY ... STEEL COMPANY

FABRICATED AT MALISON, ... NOT

APPROVED FOR FABRICATION ... DATE

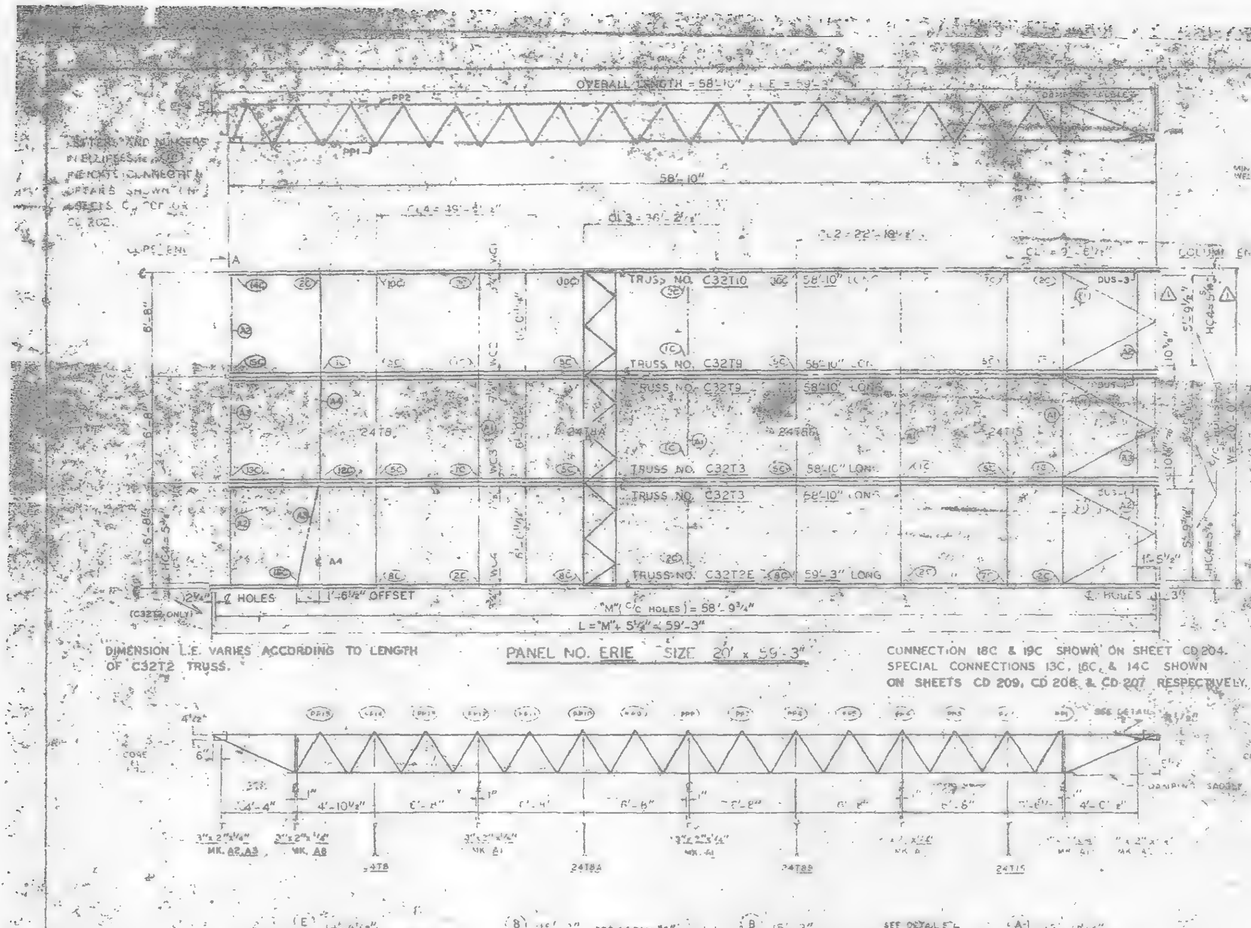
APPROVED FOR ERECTION ... DATE

DETAILED BY ... CAD. WEBER

CHECKED BY ... DATE NOV 5 1968

LAST CAT ...

DRAWING NO. ... OF ... DWGS.



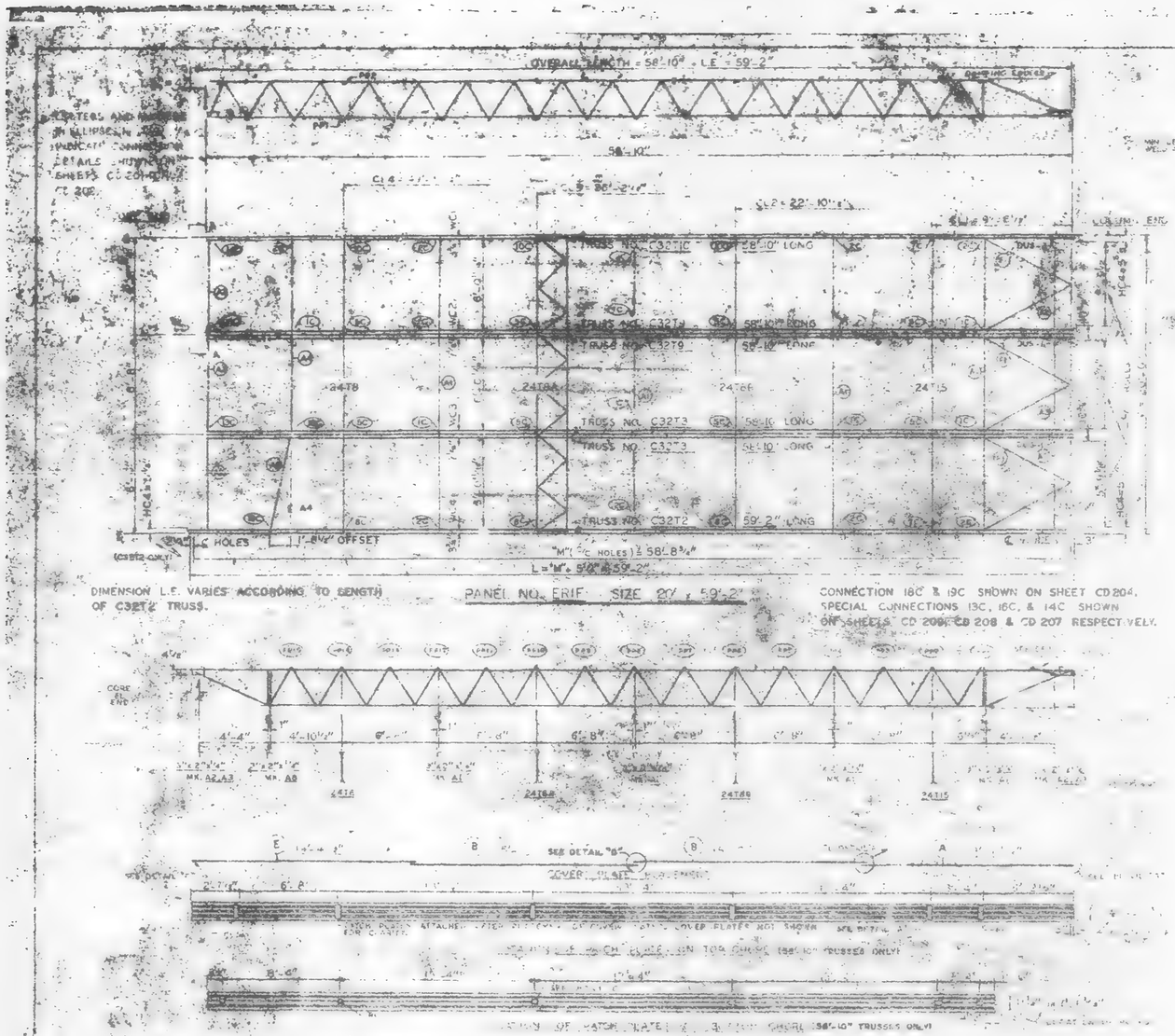
MARK			SIZE	LENGTH	WEIGHT
TOP CHORDS		1	L 4"x3½"x5/16"	58'-10"	ST 203
		1	L 4"x3½"x5/16"	58'-10"	ST 209
		1	L 4"x3½"x5/16"	59'-10"	ST 210
BOTTOM CHORDS	T1A	1	24T8	58'-10"	ST 208
	T8A	1	24T8A	58'-10"	ST 208A
	T8B	1	24T8B	59'-10"	ST 208B
	T15	1	24T15	59'-10"	ST 215
3"x 2"x¼" ANGLE	A1	4	3"x 2"x¼" x 9'-10"		ST 409
	A2	4	3"x 2"x¼" x 5'-10"		ST 403
	A3	2	3"x 2"x¼" x 5'-10"		ST 403
	A4	1	3"x 2"x¼" x 13'-3"		ST 403
	A8	1	3"x 2"x¼" x 6'-8"		ST 408
DIAGONAL PLATES	F1	2	12"x 5 5/8"x 8'-8"		ST 402
	A	3	9"x 6"x13'-1"		ST 765
	B	3	9"x 6"x13'-8"		ST 303
	C	3	9"x 6"x14'-8"		ST 303
ANGLE CLIPS	C1	20			ST 400
	C2	4			ST 400
JAMB RAIL ANGLE	C3	2			ST 298
	C3A	2			ST 298
CONNECTION BAR	CB1	1			ST 406
	CB2	6			ST 406
CONNECTION PLATES	P1	3	3"x 2"x 3/8"x 6'-2"		ST 403
	P2	1	4"x 3"x 3/8"x 5'-9"		ST 404
	P3	12	4"x 3"x 3/8"x 1'-0"		ST 404
	P5	3	4"x 3"x 3/8"x 1'-6"		ST 404
	P6	1	4"x 3"x 3/8"x 0'-8"		ST 404
SHEAR ANCHOR	SA2	8	6 SHEAR x 0'-8"		ST 400
PATCH PLATES	PP1	18	3"x 2"x 3/8"x 1'-4"		ST 401
	PP2	18	3"x 2"x 3/8"x 0'-9"		ST 401

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN NOBA IN THE E-70 SERIES OR EQUIV.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/2" x 1" FULL THROAT FILLET.

NO.	DATE	REVISION	BY
2	8-19-69	AS NOTED	G.D.C
1	6-19-68	AS NOTED	T.M.C

(2) REF. CHANGES
C32T-3 & 10, 6 — 7-22-68
" 9 & 12, 1 — 10-15-68
C32T-4 & 11, 2 — 1-6-68
" 7 & 16 & 2B, 3 — 7-22-68
C32T-4 & 11, 2 & 3 — 10-15-68
C32T-12, 1 — 1-6-68
C32T-3, 1 — 7-22-68
C32T-5, 7 & 8, 3 — 7-22-68

10-11 (SOUTH)
PANEL ERIE


OVERALL LENGTH = 58'-10" - L.E. = 59'-2"
58'-10"
TRUSS NO. C32T1C 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2 59'-2" LONG
24T8
24T8A
24T6B
24T5
L.E. HOLES
1'-8½" OFFSET
"M" (L.E. HOLES) = 58'-8¾"
L="M"+ 5/8" = 59'-2"
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.
PANEL NO. E11F SIZE 20' x 59'-2"
CONNECTION 18C & 19C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 208, CD 208 & CD 207 RESPECTIVELY.
4'-4"
6'-8"
24T6
24T5
SEE DETAIL "B"
COVER PLATE
SEE DETAIL "A"
DETAIL 'A'
SECTION B-B
DETAIL 'B'
TOP VIEW - DETAIL 'B'
DETAIL 'C'
DETAIL 'D'
E.F.F. COL. REF. LINE
TYP. EACH FLAT
ANGLE LOCATION FOR DIAGONAL FLATS ABOVE COLUMN CLIPS FOR TRUSS BEARING.
STUBS W.T.C. 2'-1.00
W.T.C. 154.00
4'-2"
MATERIAL
TRUSSES
3½" x 3½" x ¼ ANGLE
DIAGONAL FLATS
COVER PLATES
ANGLE CLIPS
CAMBER RAISER
CONNECTION BAR
CONNECTION PLATES
B SHEAR ANCHOR
PATCH PLATES
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES (E 7018).
(2) UNLESS OTHERWISE SHOWN ALL FIELD ARC WELDS TO BE ¼" FULL THROAT FILLET.
NO. DATE
6-10-88 AS NOTED
WORLD TRADE CENTER
47-48,70-71 (N)
PANEL ERIF
BLDG. B FLOORS 47-48,70-71(WEST)

OVERALL LENGTH = 58'-10" = L.E. = 58'-11"

L.E. = 1"

LETTERS AND NUMBERS IN ELLIPSES (AS (BC) AT HEAT CONNECTION DETAIL SHOWN ON SHEET CD 201 THRU CD 207

PPZ

PRI

58'-10"

CL4 = 49'-5"

CL3 = 36'-2½"

CL2 = 23'-10½"

L.E. = 9'-6½"

CORE END

COLUMN END

TRUSS NO. C32T10 58'-10" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T8 58'-10" LONG

TRUSS NO. C32T7 58'-10" LONG

TRUSS NO. C32T6 58'-11" LONG

DUS-3

HC4=5¾"

HC3=5¾"

HC2=5¾"

HC1=5¾"

24T8

24T8A

24T8E

24T15

2 HOLES 1" Ø @ 4" OFFSET

"M" (C/C HOLES) = 58'-5¾"

L = "M" + 5½" = 58'-11"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIG SIZE 20' x 58'-11"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C & 14C SHOWN ON SHEETS CD 203, CD 205 & CD 207 RESPECTIVELY.

℄ PAT. 001 REF LINE

MIN. LENGTH OF WELD 4" W.T.C. 62 K

4in. WELD M.N. 6" LONG W.T.C. 85.00

TYP. EACH FLAT

TYPICAL PLAN OF TOP CHORD DIAGONAL ANGLES FLAGED OVER COLUMN W.T.C. 223.00

STUDS W.T.C. 230.00

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

SECT. MARK					
TOP CHORD	1TK				
LOWER THRUSE	2C	1			
	3C	2			
	4C	1			
BRIDGING TH. SIZES	TB1				
	TB2				
	TB3				
3"x 2"x¼" ANGLE	A1				
	A2				
	A3				
	A4				
	A5				
DIAGONAL FLATS	F1				
	A				
SHEAR PLATES	B				
	C				
ANGLE CLIPS	C1				
	C2				
WARNING SA. TILE	SA1				
	SA2				
CONNECTION BAR	CB1				
	CB2				
CONNECTION PLATES	P1				
	P2				
	P3				
	P5				
	P6				
"B" SHEAR ANCHOR	SA2		"B" HEDAR		
PATCH PLATES	PP1				
	PP2				

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" & 1/5" FULL THROAT FILLET.

3½"x 2½"x5/16" MK. A2, A3

3½"x 2½"x5/16" MK. A8

24T8

24T8A

24T8E

24T15

E 14'-4½" B 15'-5" SEE DETAIL "D" B 15'-2" SEE DETAIL "C" A 13'-2½"

SEE DETAIL "F"

2'-7½" 6'-8" 12'-4" 12'-4" 6'-7½"

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

8'-4" 8'-4" 3'-4"

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

SECTION C-C

DETAIL "D"

TOP VIEW DETAIL "B"

DETAIL "E"

DETAIL "F"

SECTION A-A

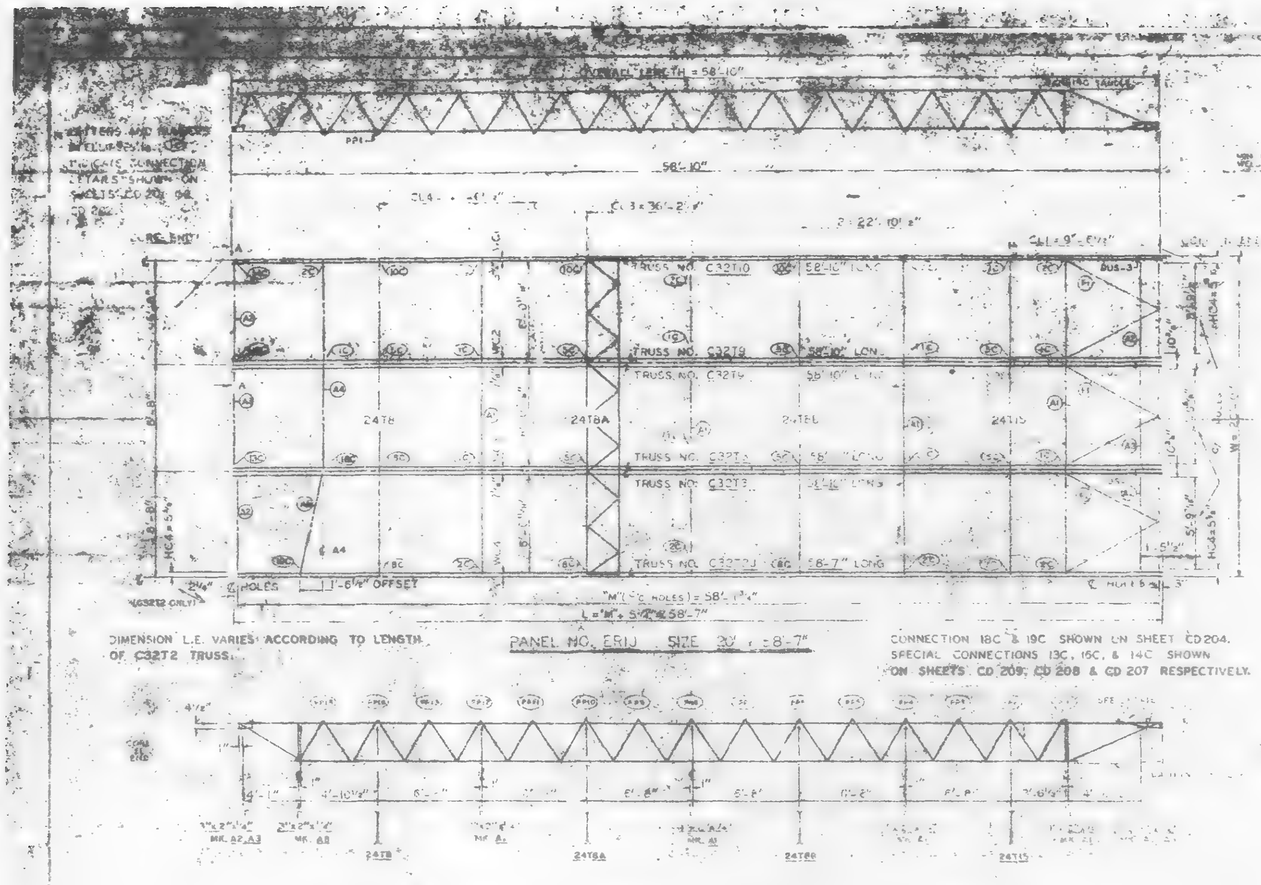
NO.	DATE	REVISION	BY
2	6-10-68	AS NOTED	DC
1	9-18-68	AS NOTED	TN.C.

FLOOR FRAME DETAIL

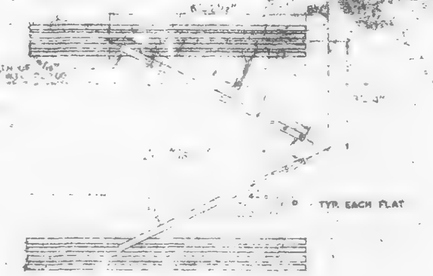
BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST)

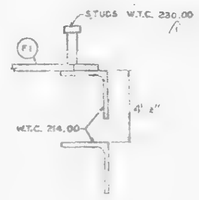
BLDG. B FLOORS 38 (EAST & WEST) 39-40 (SOUTH)

PANEL ERIG



CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 15C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



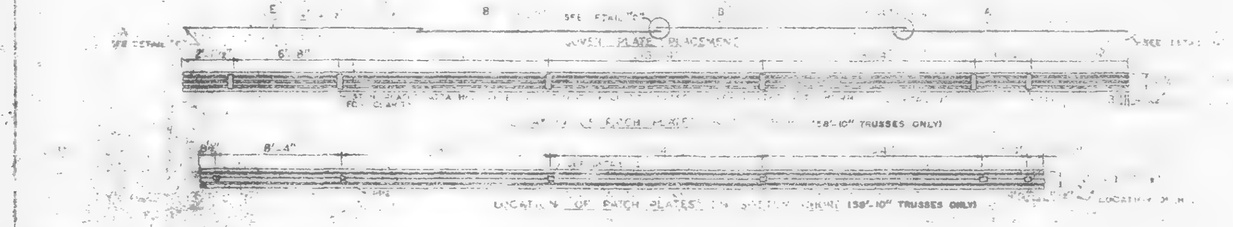


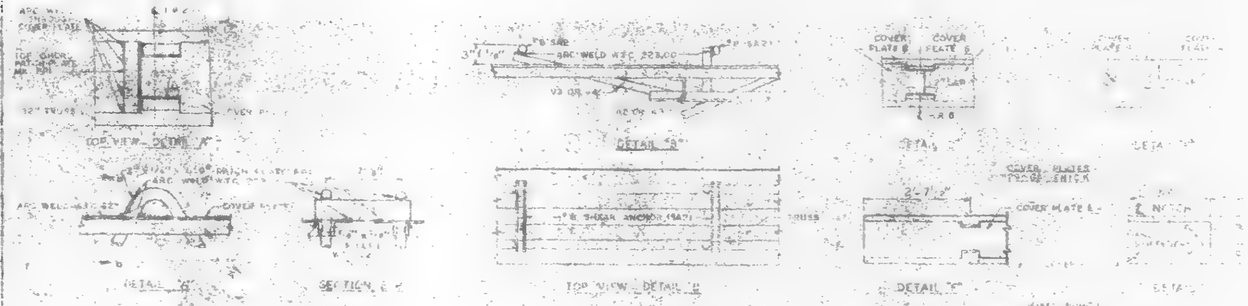
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQ'D	MATERIAL MK	SIZE	DATA
FLOOR TRUSSES	A2J	1	
	B3	2	
	1B	2	
	7B	1	
BRIDGING ANGLES	1B	2	
	T&B	4	
	T&B	2	
	TB	1	
3", 2", 5/8" ANGLE	A1	4	
	A2	4	
	A3	8	
	A4	4	
	A5	4	
DIAGONAL FLATS	F1	8	
FLOOR PLATES	A	2	
	B	2	
	F	3	
ANGLE CLIPS	C1	20	
	C2	4	
AMPLIFICATION	CR-3	6	
CONNECTION BAR	CB2	2	
CONNECTION PLATES	P1	8	
	P2	1	
	P3	3	
	P5	1	
	P6	1	
8 SHEAR ANCHOR	2A2	6	"8 SHEAR ANCHOR"
PATCH PLATES	PL2	18	

(F1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(F2) UNLESS OTHERWISE SHOWN ON CONNECTION AND WELDS TO BE 1/4" FULL THROAT FILLET.





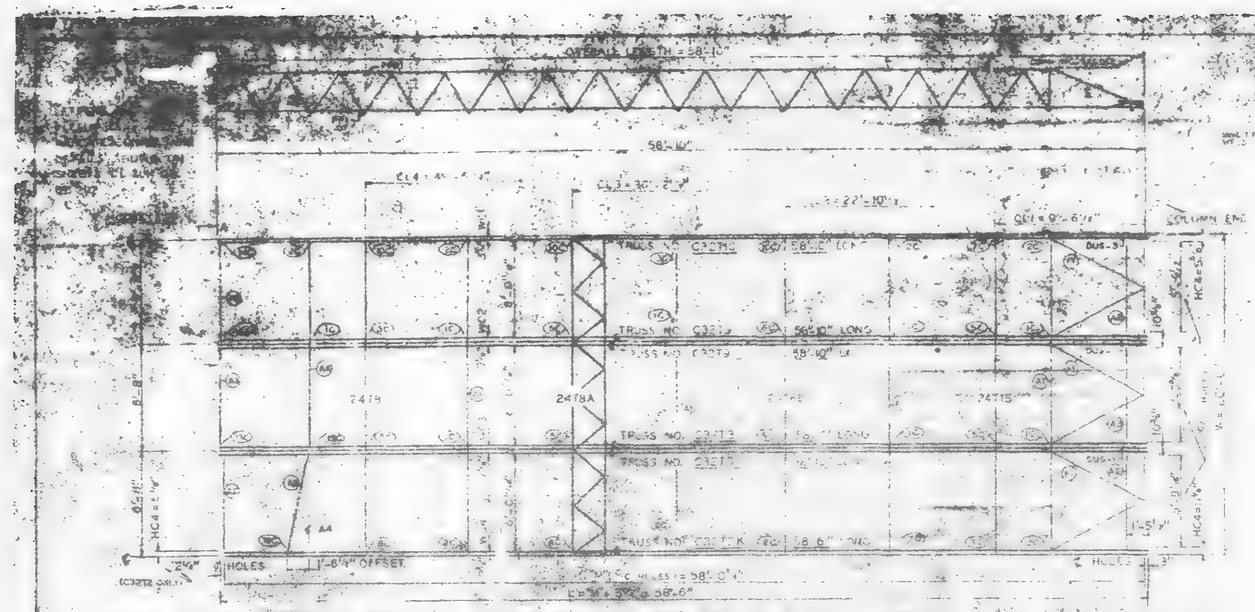
NO.	DATE	REVISION	BY	CHK'D
1	5-19-69	AS NOTED		DCC

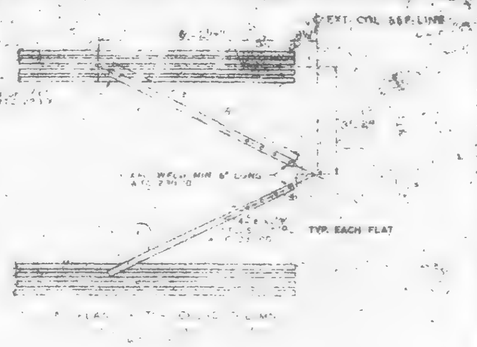
REF. DRAWGS.

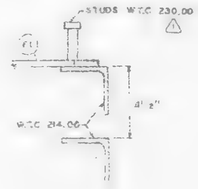
FLOOR PANEL DETAILS

BLDG. B FLOORS 40 (WEST)

BLDG. B FLOORS 40 (N)



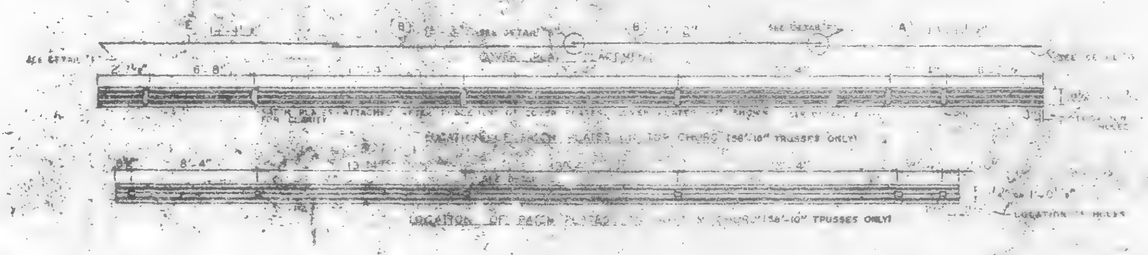


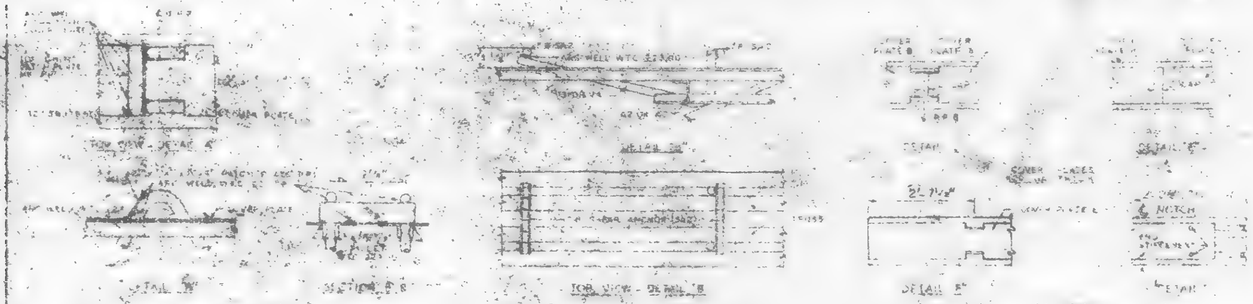


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-8" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MARK	SIZE	LENGTH	NO. PIECES	WEIGHT
FLOOR TRUSSES				
BRIDGING TRUSSES				
3½ 2½"x½" ANGLE				
DIAGONAL FLATS				
CONNECTION PLATES				
ANGLE CLIPS				
ANCHOR SADDLE				
CONNECTION PAD				
CONNECTION PLATES				
¾ SHEAR ANCHOR				
PATCH PLATES				

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E4XIO SERIES OR EQUAL.
(2) UNLESS OTHERWISE NOTED, ALL CONNECTION ARC WELDS TO BE ¼" FILLET FULL THICKNESS.





NO.	DATE	
1	6-19-69	AS NOTED

FLOOR PANEL DETAILS
BLDG. A FLOORS 45-46 (N)
BLDG. B FLOORS 45-46 (N)
LACLEDE STEEL CO.

LETTERS AND NUMBERS IN ELLIPSES (HEXAGONS) INDICATE CONNECTION DETAILS SHOWN ON SHEET S201 OR S202

OVERALL LENGTH = 58'-10"

58'-10"

CLASS "A" CONCRETE

SLOPE = 4"/12"

CL BEARING

CL BEARING

HORIZ. END

VERT. END

DUS-3

TRUSS NO. C32T2

TRUSS NO. C32T3

TRUSS NO. C32T2M

24TB

24TBA

24TA

24TC

24TBA

24TB

HC4=5'-0"

HC4=5'-0"

6'-8"

6'-8"

10'-0"

5'-5 1/2"

5'-5"

5'-9"

4'-5 1/2"

2 1/4" HOLES

1'-6 1/2" OFFSET

"M" (2 HOLES) = 57'-9 3/4"

L = "M" + 3 1/2" = 58'-1"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIM SIZE 2'-0" x 8'-3"

CONNECTION 16C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 17C, 18C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

EXT. COL. REF. LINE

6 - 3/4"

MAINTAIN 1/16" MIN. WELD AT WT'S

3'-4"

F.O. TYP. EACH PLAT

TYPICAL FLANGE OF T.E. CHORD COLUMN FOR DIAGONAL FLAT BRACES PLACED ON SECTION WITH 223.00

STUDS W.T.C. 230.00

F1

W.T.C. 234.00

4 1/2"

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MATERIAL				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
BRACING TRUSS	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3" x 2" x 1/4" ANGLE	[illegible]	[illegible]	[illegible]	[illegible]
DIAGONAL FLATS	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
ANGLE CLIPS	C1	20	[illegible]	ST 100
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CONNECTION PIPE	CB1	1	[illegible]	[illegible]
	CB2	4	[illegible]	[illegible]
CONNECTION PLATES	P1	5	[illegible]	ST 400
	P2	1	[illegible]	[illegible]
	P3	3	[illegible]	ST 400
	P8	1	[illegible]	ST 40
1" Ø SHEAR ANCHOR	A2	6	[illegible]	ST 400
PATCH PLATES	P7	16	[illegible]	[illegible]

(1) ALL ARC WELD TO BE MADE WITH [illegible] RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL [illegible] WELDS TO BE 1/4" FULL THROAT FILLET.

SEE DETAIL "D"

SEE DETAIL "E"

COVER PLATE PLACEMENT

LOCATION OF SPLICE PLATES AS SHOWN ON SHEET S201

SEE DETAIL "C"

SEE DETAIL "B"

SECTION A-A

SECTION B-B

SECTION C-C

DETAIL "A"

DETAIL "B"

DETAIL "C"

DETAIL "D"

DETAIL "E"

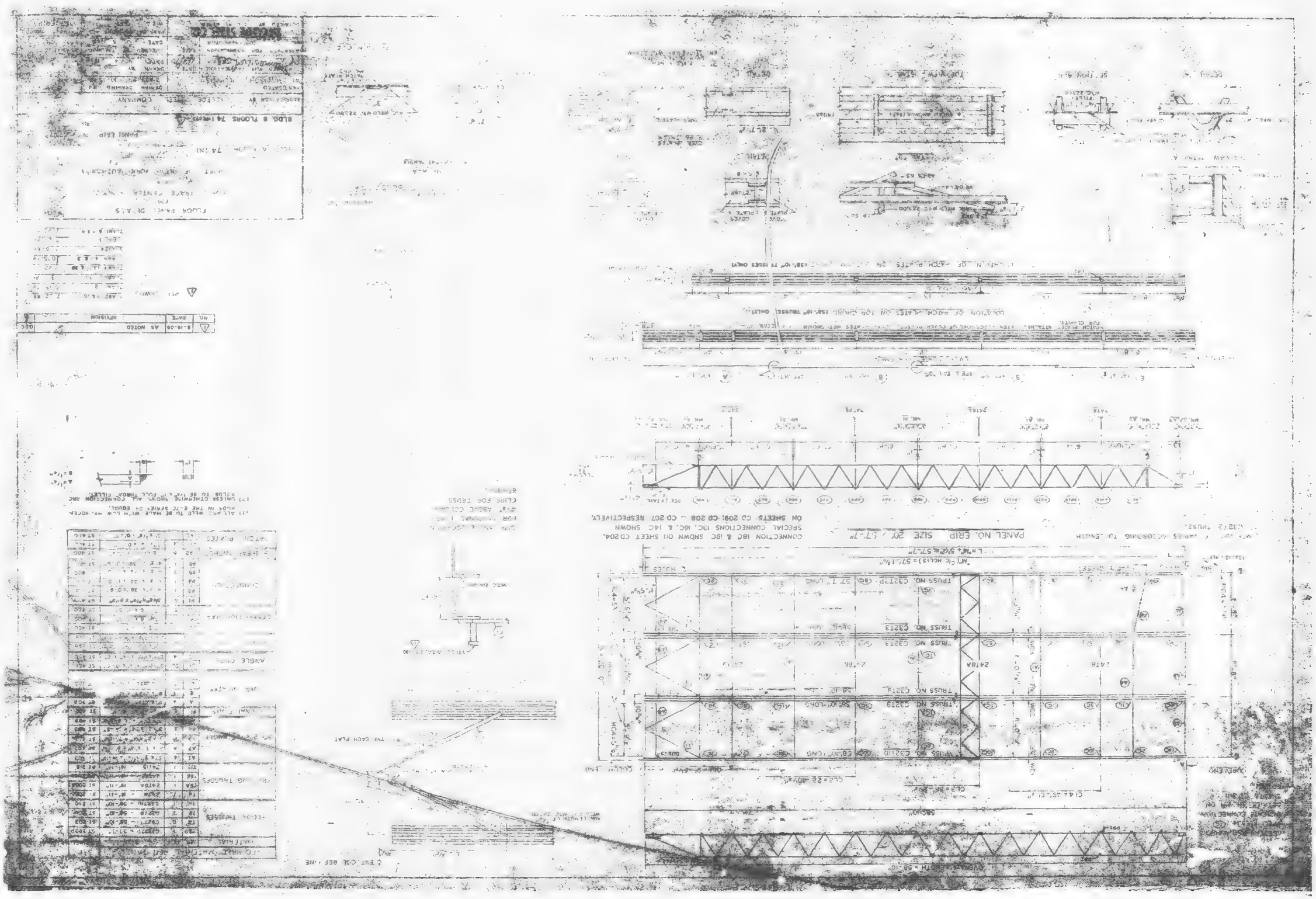
NO	DATE	REVISION	BY
1	6-19-69	AS NOTED	G.C.

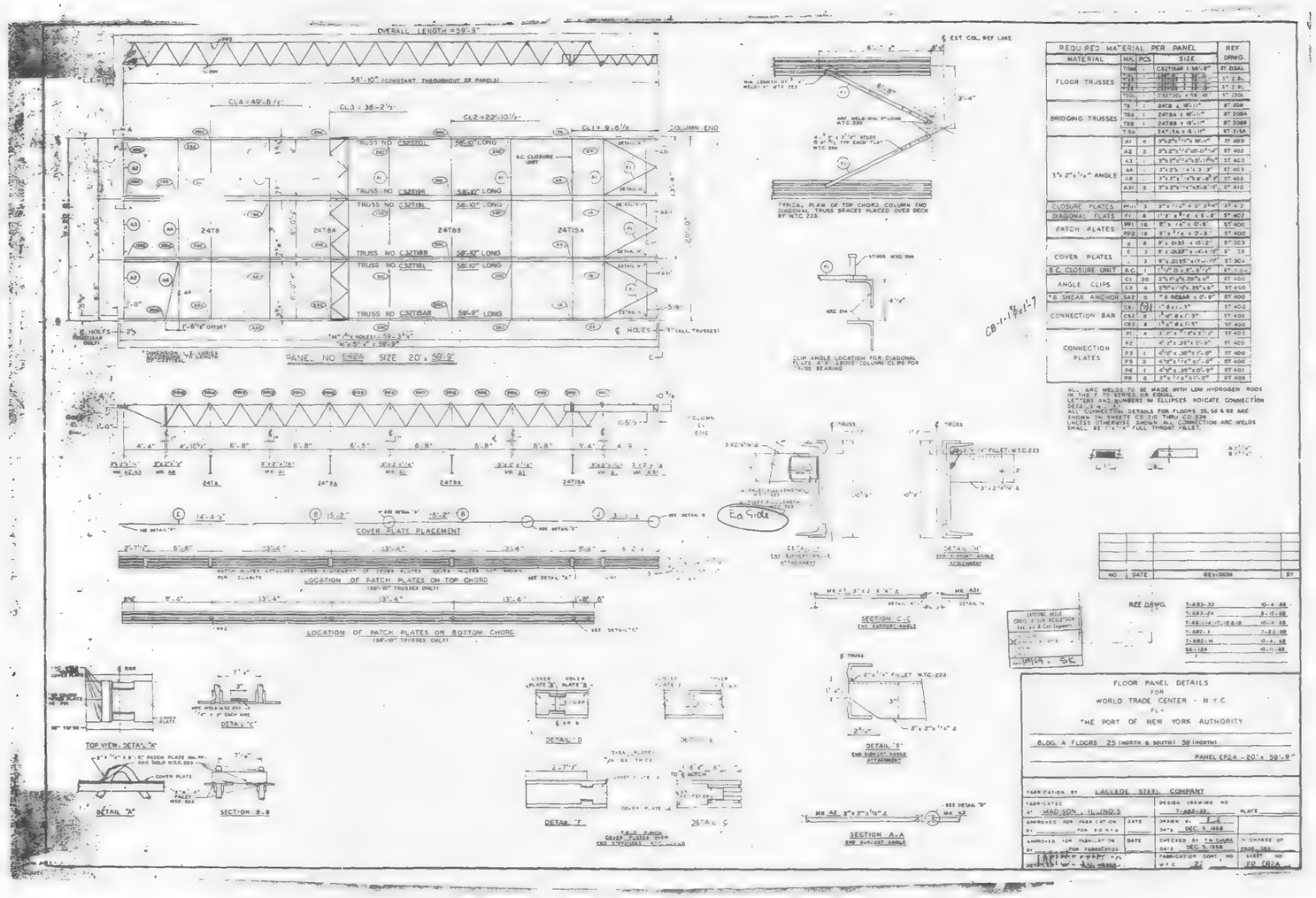
PER DWG. [illegible]

BLOCK PANEL DETAILS

BLDG. B FLOORS 72-73 (WEST)

ERIM





REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK.	POS.	SIZE	
FLOOR TRUSSES	T20AL	1	C32T15AR x 58'-9"	ST 2128L
	T19C	1	C32T15AR x 58'-9"	ST 2128L
	T18L	1	C32T15AR x 58'-9"	ST 2128L
	T18R	1	C32T15AR x 58'-9"	ST 2128L
	T20L	1	C32T20L x 58'-10"	ST 2120L
BRIDGING TRUSSES	TB	1	24T8 x 18'-11"	ST 2128
	TBA	1	24T8A x 18'-11"	ST 2128A
	TBB	1	24T8B x 18'-11"	ST 2128B
	T15A	1	24T15A x 18'-11"	ST 2128A
3"x 2"x 1/4" ANGLE	A1	4	3"x2"x1/4" x 180'-11"	ST 403
	A2	2	3"x 2"x 1/4" x 180'-11"	ST 403
	A3	1	3"x 2"x 1/4" x 38'-1"	ST 403
	A4	1	3"x 2"x 1/4" x 3'-3"	ST 403
	A8	1	3"x 2"x 1/4" x 8'-8"	ST 403
	A31	3	3"x 2"x 1/4" x 5'-8"	ST 403
CLOSURE PLATES	PM-1	3	3"x 1 1/2" x 0'-2 3/4"	ST 402
DIAGONAL FLATS	F1	8	11" x 3" x 8'-8"	ST 402
PATCH PLATES	PP1	18	8" x 1/4" x 10'-8"	ST 400
	PP2	18	8" x 3/4" x 10'-8"	ST 400
COVER PLATES	A	6	8" x .0135" x 15'-2"	ST 323
	C	3	8" x .0135" x 14'-4 7/8"	ST 323
	-	3	8" x .0135" x 11'-10 1/2"	ST 323
B.C. CLOSURE UNIT	B.C.	1	11" D x 8'-6 1/2"	ST 2120
ANGLE CLIPS	C1	20	3"x 3"x 1/4" x 2'-3"	ST 400
	C2	4	3"x 3"x 1/4" x 1'-3"	ST 400
3/4 SHEAR ANCHOR	SA3	6	3/4 DIAM x 0'-8"	ST 400
CONNECTION BAR	CB1	1	1/2" x 6" x 1'-3"	ST 400
	CB2	6	1/2" x 8" x 1'-3"	ST 400
	CB3	6	1/2" x 8" x 1'-3"	ST 400
CONNECTION PLATES	P1	4	3/8" x 9" x 2'-1"	ST 400
	P2	1	5/8" x 3'-5" x 5'-9"	ST 400
	P3	1	5/16" x 3'-5" x 1'-8"	ST 400
	P3	2	5/16" x 7" x 2'-8"	ST 400
	P8	1	5/16" x 3'-5" x 0'-9"	ST 401
	P8	8	3/8" x 7" x 0'-11"	ST 402

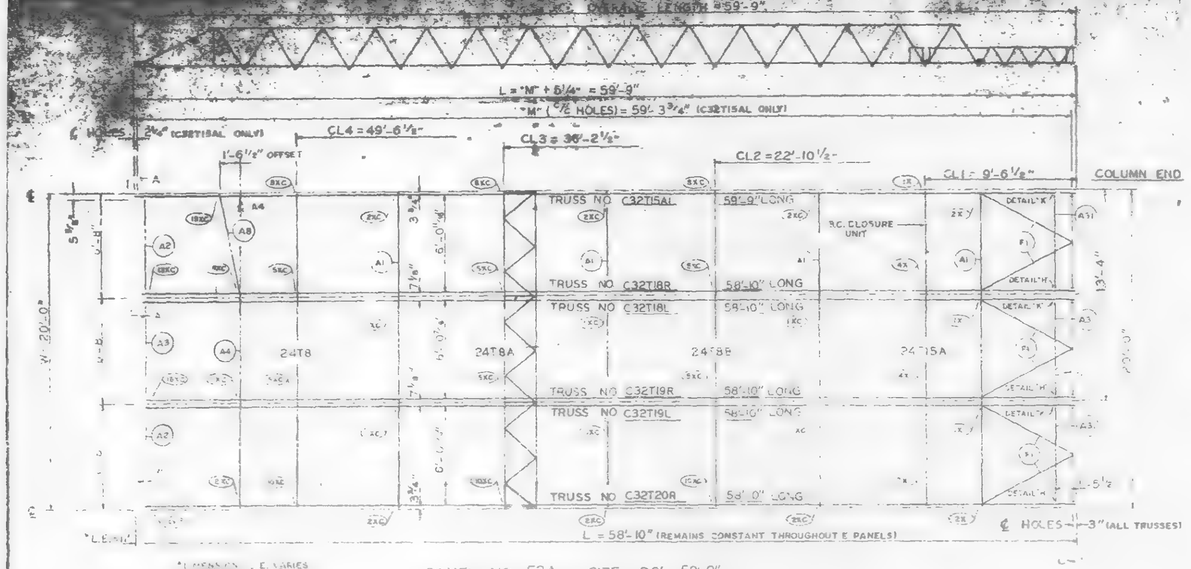
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E 70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS.
ALL CONNECTING DETAILS FOR FLOORS 25, 54 & 82 ARE SHOWN ON SHEETS CD 210 THRU CD 228 UNLESS OTHERWISE SHOWN. ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

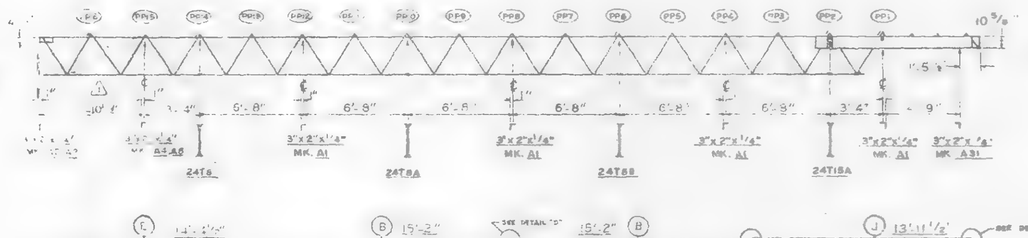
REF DRWG.	
T-883-33	10-4-68
T-883-24	8-15-68
T-88-14,17,18&19	10-4-68
T-882-3	7-22-68
T-882-14	10-4-68
SA-124	10-11-68

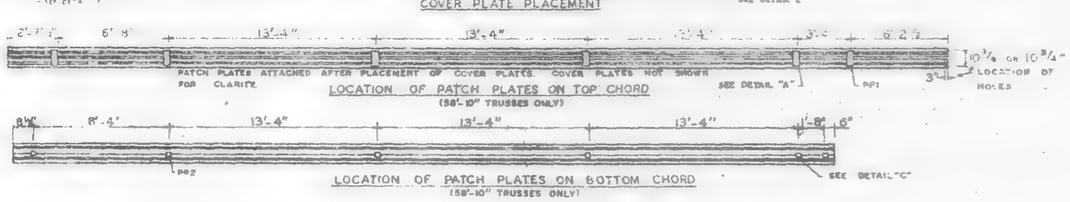
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY
BLDG. A FLOORS 25 (NORTH & SOUTH) 54 (NORTH)
PANEL EP2A - 20'x 59'-9"

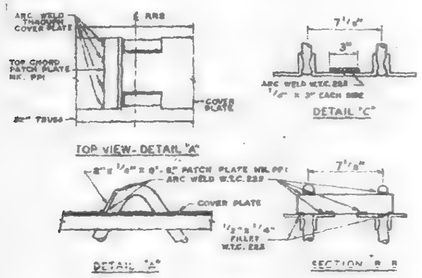
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO T-883-33	PLATE
APPROVED FOR FABRICATION BY — FOR PONYA	DATE	DRAWN BY JWC DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY — FOR FABRICATOR	DATE	CHECKED BY TH CHUNG DATE DEC. 5, 1968	N CHANGE OF PROD. DES.
DETAILED BY JWC		FABRICATION CONT. NO W.T.C. 82	SHEET NO EP 2A

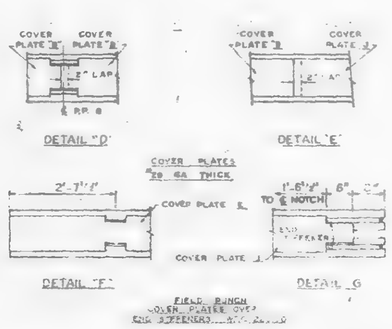


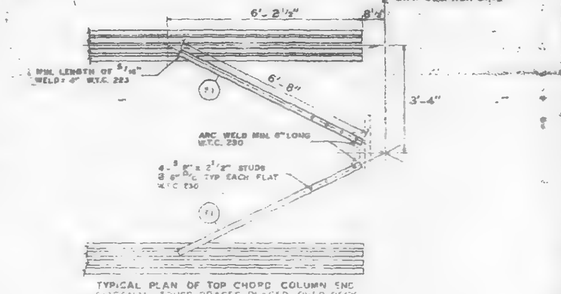
PANEL NO. E2A SIZE 20' x 59'-9"





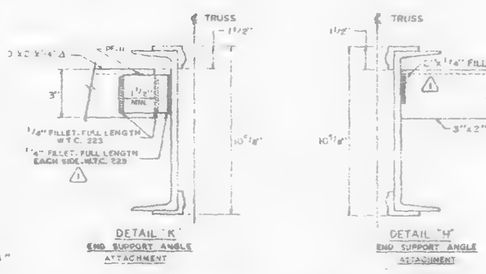




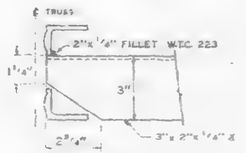


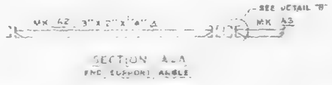
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T15AL	1	C32T15AL x 59'-9"	ST 15AL
	T18R	1	C32T18R x 58'-10"	ST 218R
	T18L	1	C32T18L x 58'-10"	ST 218L
	T19R	1	C32T19R x 58'-10"	ST 219R
	T19L	1	C32T19L x 58'-10"	ST 219L
	T20R	1	C32T20R x 58'-10"	ST 220L
BRIDGING TRUSSES	T8	1	24T8 x 19'-11"	ST 208
	T8A	1	24T8A x 19'-11"	ST 208A
	T8B	1	24T8B x 19'-11"	ST 208B
	T15A	1	24T15A x 19'-11"	ST 215A
3"x 2"x 1/4" ANGLE	A1	4	3"x2"x1/4 x 9'-.."	ST 403
	A2	2	3"x2"x1/4 x5'-11 1/2"	ST 403
	A3	1	3"x2"x1/4 x 5'-.. 3/4"	ST 403
	A4	1	3"x2"x1/4 x 13'-3"	ST 403
	A8	1	3"x2"x1/4 x 8'-8 1/2"	ST 405
	A31	3	3"x2"x1/4"x5'-8 1/4"	ST 410
CLOSURE PLATES	PP1	3	3"x 1/4" x 0'-2 3/4"	ST 412
DIAGONAL PLATES	P1	8	1'-2" x 1'-4" x 6'-8"	ST 402
PATCH PLATES	PP1	8	2" x 1/4" x 0'-3"	ST 400
	PP2	18	3" x 3/4" x 0'-3"	ST 400
COVER PLATES	8	6	9'x .0135" x 15'-2"	ST 303
	F	3	9'x .0135" x 14'-4 1/2"	ST 303
		3	9"x .0135" x 13'-11 1/2"	ST 304
R.C. CLOSURE UNIT	R.C.	1	1'-4" O x 6'-6" x 7"	ST 215A
ANGLE CLIPS	C1	20	2"x1 1/2"x.25"x 6"	ST 400
	C2	4	2"x1 1/2"x.25"x 6"	ST 400
[illegible]	SA2	0	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	2	"S" x 1'-3"	ST 400
	CB2	8	3/8" O x 1'-3"	ST 400
	CB3	6	5/8" O x 1'-5"	ST 400
	PL	4	3" 2"x 5"x 6'-6" 2"	ST 400
CONNECTION PLATES	P2	1	1'-2"x.39"x 0'-9"	ST 400
	P3	1	4 1/2"x.39"x 1'-0"	ST 400
	P5	3	4 1/2"x1/4"x1'-6"	ST 400
	P8	1	4 1/2"x.39"x 0'-9"	ST 401
	Hw	6	3"x 1'-2"x1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, e.g. (DE)
ALL CONNECTION DETAILS FOR FLOORS 25, 58 & 92 ARE SHOWN ON SHEETS CD 216 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4"x1/4" FULL THROAT FILLET.



SECTION C-C
END SUPPORT ANGLE





NO	DATE	REVISION	BY
2	7-1-69	AS NOTED	G.D.C.
1	2-4-69	AS NOTED	G.D.C.

REF DRWG.

7-AB3-32	10-4-68
7-AB3-24	8-15-68
7-AB1-16,17,18&19	10-4-68
7-AB2-3	7-22-68
7-AB2-16	10-4-68
SA-124	10-11-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

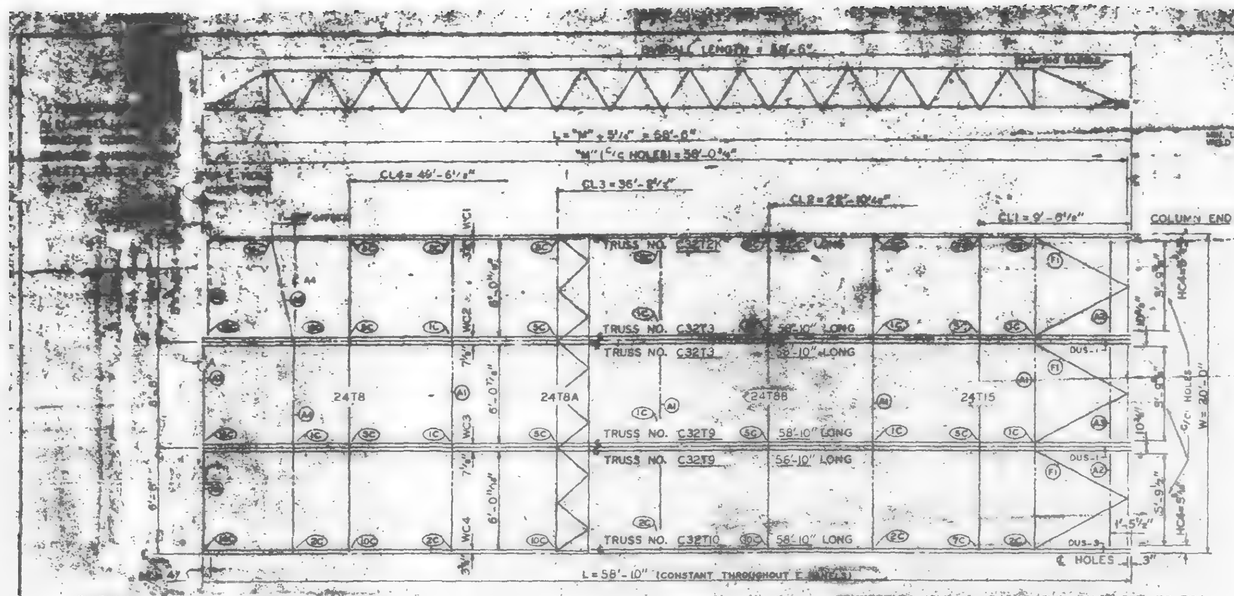
BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL E2A 20'-0" x 59'-9"

BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB2-32	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHUMA DATE DEC. 5, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]		FABRICATION CONTR. NO. W.T.C. 221	SHEET NO. FP E2A

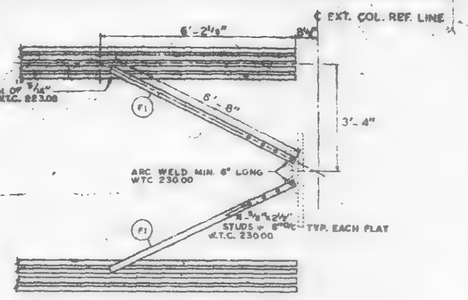
LACLEDE STEEL CO.



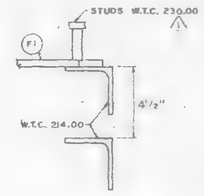
DIMENSION L.C. VARIES ACCORDING TO LENGTH OF C32T? TRUSS

PANEL NO. E1K SIZE 20' x 58'-6"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

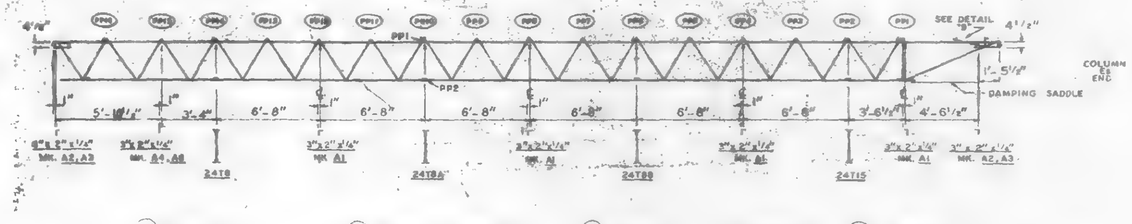


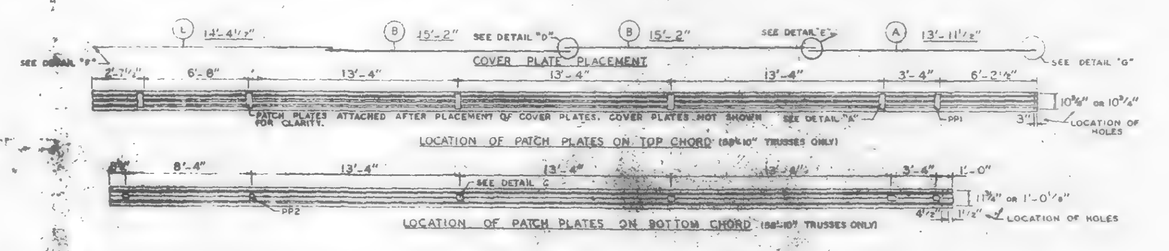
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T2K	1	C32T2K - 58'-6"	ST 202K
	T3	2	C32T3 - 58'-10"	ST 203
	T8	2	C32T8 - 58'-10"	ST 208
	T8L	1	C32T8L - 56'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 18'-11"	ST 208
	T8A	1	24T8A - 18'-11"	ST 208A
	T8B	1	24T8B - 18'-11"	ST 208B
	T15	1	24T15 - 18'-11"	ST 215
3"x 2"x1/4" ANGLE	A1	4	3" x 2" x1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x1/4" x 8'-11"	ST 402
	A3	2	3" x 2" x1/4" x 8'-11"	ST 403
	A4	1	3" x 2" x 1/4" x 17'-3"	ST 403
	A5	1	3" x 2" x1/4" x 65'-8"	ST 405
DIAGONAL FLATS	L	6	1 1/2" x 3/8" x 6'-8"	ST 402
COVER PLATES	A	3	8" x .0135" x 13'-11"	ST 303
	B	8	8" x .0135" x 15'-2"	ST 303
	E	3	8" x .0135" x 14'-8"	ST 303
ANGLE CLIP	C1	20	2" x 1/4" x 1'-4" x 0'-8"	ST 400
	C2	4	2" x 1/4" x 1'-4" x 6"	ST 400
DAMPING SADDLE	DS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-5"	ST 298
	DS-3	1	3 1/2" x 3 1/2" x 3/16" x 3'-5"	ST 298
CONNECTION BAR	CB1	1	1" ø x 1'-3"	ST 400
	CB2	6	3/4" ø x 1'-3"	ST 400
	CB3	6	1" ø x 1'-5"	ST 400
CONNECTION PLATES	PA	5	3" x 1/4" x 8"	ST 400
	PC	1	4 1/2" x 3/8" x 1'-4"	ST 400
	PD	1	4 1/2" x 3/8" x 1'-4"	ST 400
	PE	3	4 1/2" x 1/4" x 1'-8"	ST 400
	PF	1	4 1/2" x 3/4" x 0'-9"	ST 401
"B" SHEAR CONNECTOR	SA2	8	3/4" ø STUD SHEAR CONNECTOR	ST 404
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 5/16" x 0'-3"	ST 400

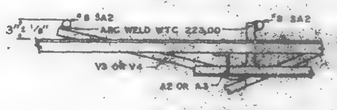
(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROCKER RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

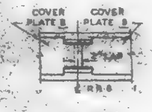




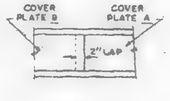
TOP VIEW - DETAIL "A"



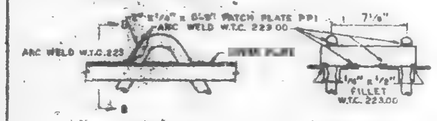
DETAIL "B"



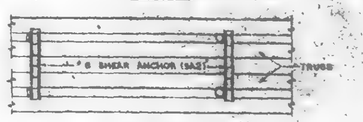
DETAIL "D"



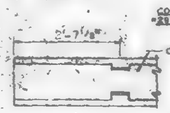
DETAIL "E"



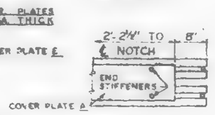
DETAIL "A" SECTION B-B



TOP VIEW - DETAIL "B"

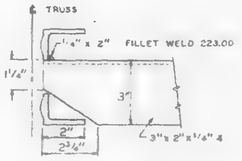


DETAIL "F"



DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "J" END SUPPORT ANGLE ATTACHMENT

SECTION A-A END SUPPORT ANGLE

DETAIL "C"

SECTION C-C

NO	DATE	REVISION	BY
1	8-18-69	AS NOTED	G.D.C

⚠ REF. DRWGS.

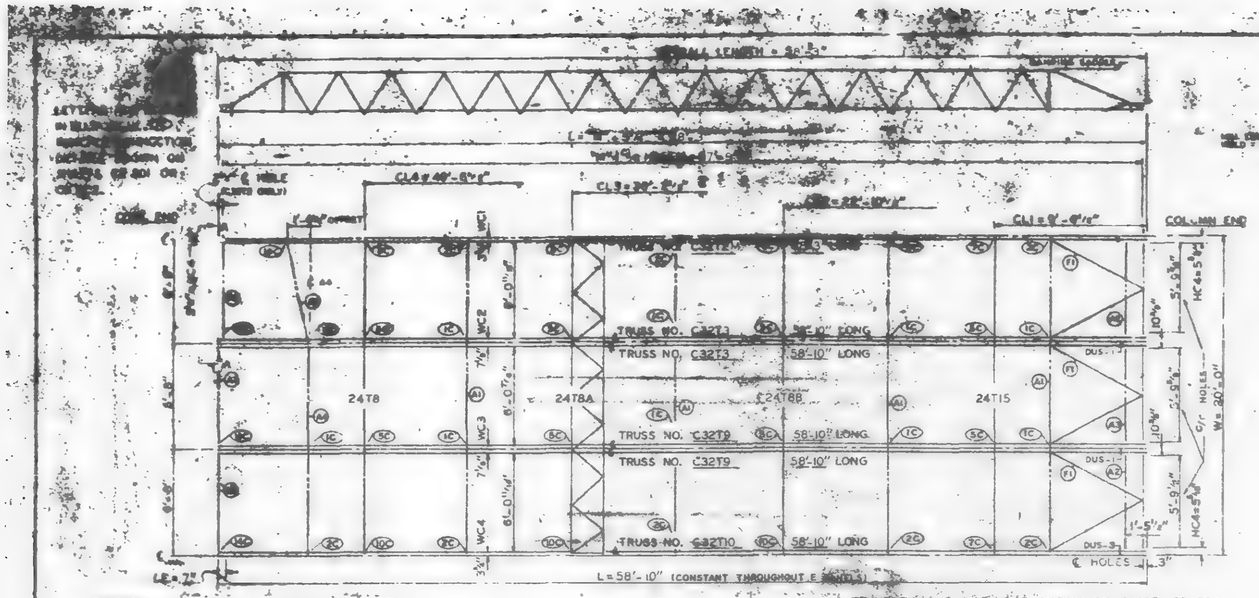
7-AB2-3 & 13	7-22-68
7-AB3-11	10-15-68
7-AB4-3 & 11	1-3-69
7-AB4-15 & 16, 39	7-22-68
7-AB4-42 & 3	10-15-68
SA-124	1-6-69
7-AB1-3	7-22-68
7-AB1-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 46 (N)
PANEL E1K 20' x 58'-6"
BLDG. B FLOORS 46 (WEST) ⚠

FABRICATION BY LACLEDE STEEL COMPANY

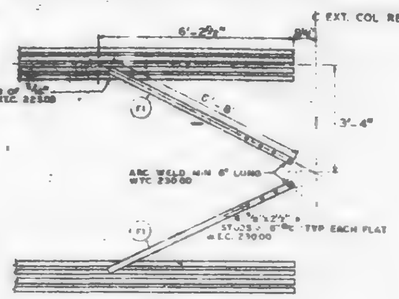
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7 AB3-11
APPROVED FOR FABRICATION BY [illegible] ONLY ▲	DATE 11/2/70
APPROVED FOR FABRICATION BY ____ FOR FABRICATOR	DATE
DETAILED BY [illegible]	DRAWN BY GDC DATE NOV. 1, 1968
	CHECKED BY T.M.CHERA DATE NOV. 4, 1968
	FABRICATION CONT. NO. 221
	PLATE NO. SHEET OF E1K



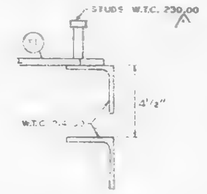
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1M SIZE 20' x 58'-3"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

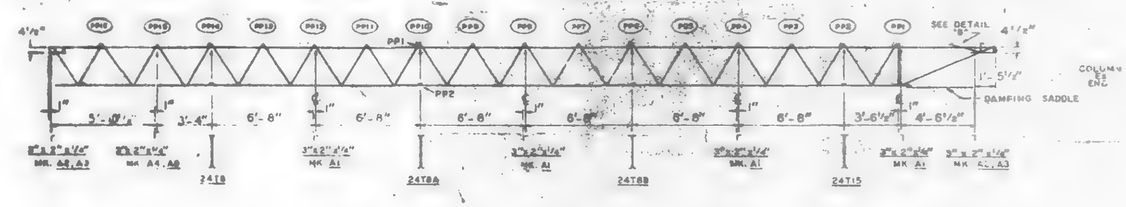


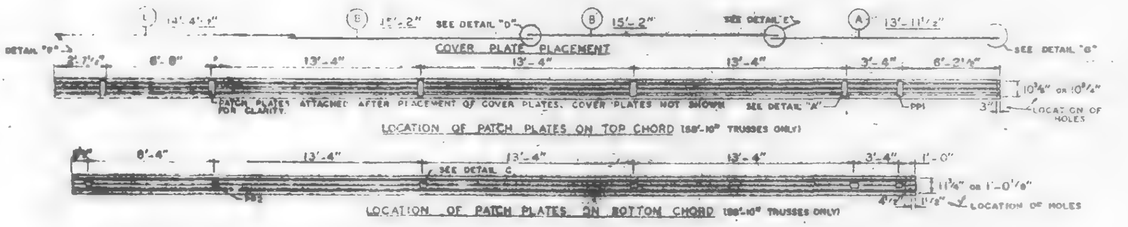
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

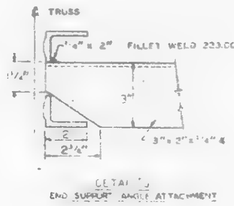
REQUIRED MATERIAL PER PANEL				REF DRWG.
MATERIAL	MK	PCS.	SIZE	
FLOOR TRUSSES	T2M	1	C32T2M - 58'-3"	ST 202M
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11"	ST 403
	A4	1	3" x 2" x 1/4" x 11'-4"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-6"	ST 403
DIAGONAL FLATS	F1	6	1'-2" x 5/16" x 6'-8"	ST 402
COVER PLATES	A	3	8" x 0'-3/8" x 19'-11"	ST 303
	B	8	8" x 0'-3/8" x 19'-2"	ST 303
	C	1	8" x 0'-3/8" x 14'-8"	ST 303
RIDGE CLIP	C1	20	3" x 3" x 1/4" x 0'-6"	ST 401
	C2	4	3" x 3" x 1/4" x 0'-6"	ST 401
DAMPING SADDLE	DS	2	3" x 3" x 1/4" x 3'-6"	ST 968
	DS2	1	3" x 3" x 1/4" x 4'-6"	ST 968
CONNECTION PLATES	P1	6	6" x 3" x 1/4" x 0'-6"	ST 401
	P2	5	6" x 3" x 1/4" x 0'-6"	ST 401
	P3	1	6" x 3" x 1/4" x 0'-6"	ST 401
	P4	1	6" x 3" x 1/4" x 0'-6"	ST 401
	P5	1	6" x 3" x 1/4" x 0'-6"	ST 401
	P6	1	6" x 3" x 1/4" x 0'-6"	ST 401
CONNECTION PLATES	P7	3	6" x 3" x 1/4" x 0'-6"	ST 401
	P8	1	6" x 3" x 1/4" x 0'-6"	ST 401
8 SPEA...	A4	8	...	ST 4...
PATCH PLATES	PP1	10	2'-0" x 8" x 0'-3/8"	ST 4...
	PP2	10	3'-0" x 8" x 0'-3/8"	ST 4...

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN NODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 5/16" x 1" FULL THROAT FILLET.

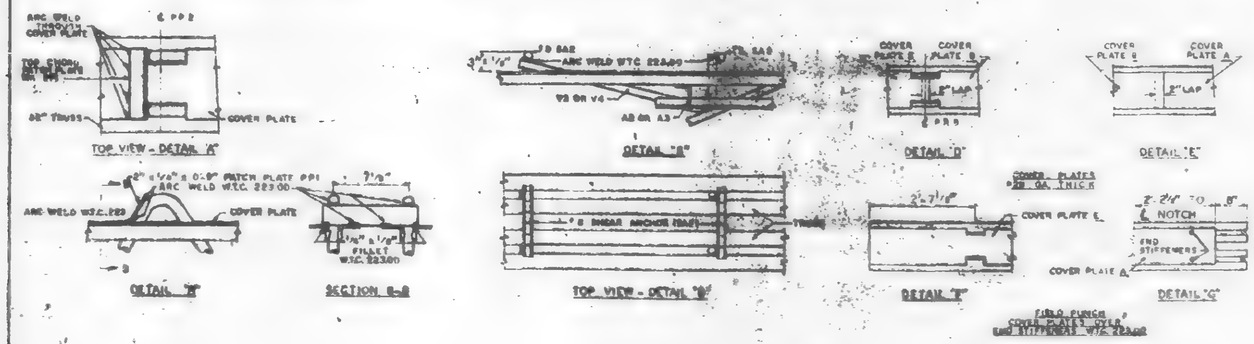


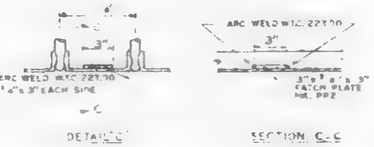




DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

1	8-19-68	AS NOTED	DPC
NO.	DATE		



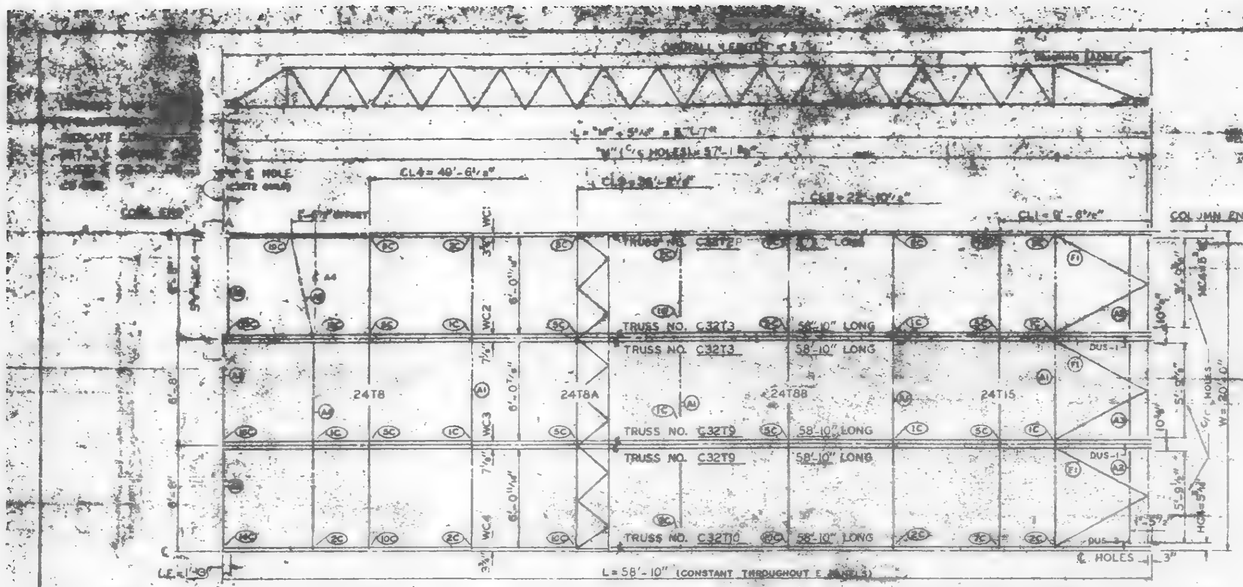


FLOOR PANEL DETAILS
FOR
AUTO TRADE CENTER - N.Y.C.
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 72-73 (N)
PANEL E1M
BLDG. B FLOORS 72-73 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

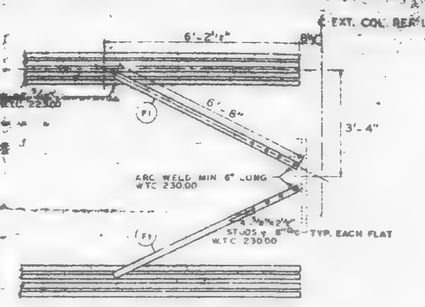
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 A82 31	
APPROVED FOR FABRICATION BY [illegible]	DATE 11/4/70	DRAWN BY [illegible] DATE NOV. 1, 1968	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.W.M.P.A. DATE NOV. 4, 1968	
RETAINED BY [illegible]		FABRICATION CONT. NO. 221	SHEET NO. FP E1M



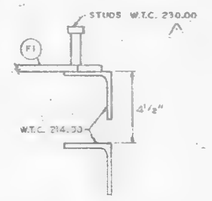
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32TR TRUSS.

PANEL NO. EIP SIZE 20' x 57'-7"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

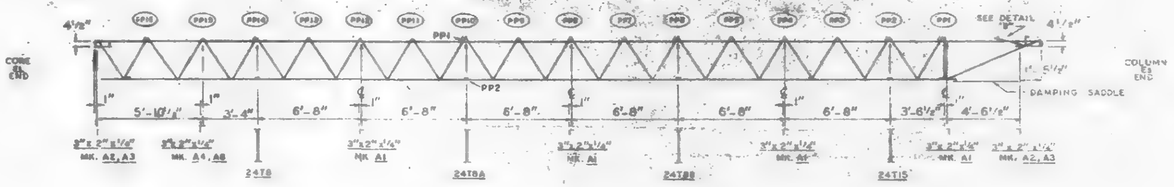


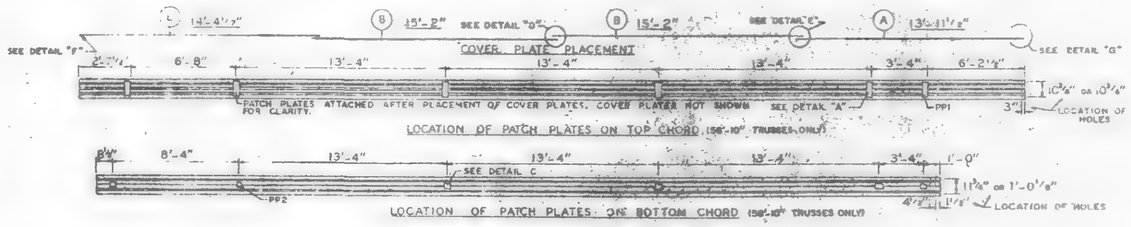
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

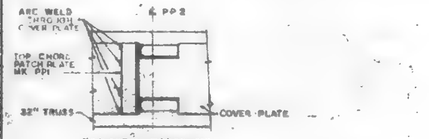
REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS	SIZE	
FLOOR TRUSSES	T8P	1	C32T2P - 57'-7"	ST 202P
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3"x 2"x1/4" ANGLE	A1	4	3"x 2"x1/4"x 19'-11"	ST 403
	A2	4	3"x 2"x1/4"x 9'-11"	ST 403
	A3	2	3"x 2"x1/4"x 5'-11"	ST 403
	A4	1	3"x 2"x1/4"x 8'-3"	ST 403
	A8	1	3"x 2"x1/4"x 8'-3 1/2"	ST 403
DIAGONAL FLATS	F1	6	1'-2"x 5/8"x 8'-8"	ST 402
COVER PLATES	A	3	0"x .0135"x 13'-11 1/2"	ST 303
	B	8	0"x .0135"x 15'-2"	ST 303
	C	3	0"x .0135"x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	20	2"x 1/2"x 3"x 0'-4"	ST 400
	C2	4	2"x 1/2"x 3"x 0'-6"	ST 400
DAMPING SADDLE	DUS-1	2	3"x 3"x 3/16"x 2'-3"	ST 288
	DUS-3	1	3"x 3"x 3/16"x 3'-6"	ST 288
CONNECTION BAR	CB1	1	1" ø x 1'-2"	ST 400
	CB2	6	3/4" ø x 1'-3"	ST 400
	CB3	6	3/4" ø x 1'-6"	ST 400
CONNECTION PLATES	F1	5	3"x 1/2"x 8"x 1'-"	ST 400
	F2	1	4"x 1/2"x 1'-3"x 1'-"	ST 400
	F3	1	4"x 1/2"x 1'-3"x 1'-"	ST 400
	F5	3	4"x 1/2"x 1'-6"x 1'-6"	ST 400
	PP	1	4"x 1/2"x 1'-3"x 1'-"	ST 401
"B" SHEAR CONNECTOR	SA2	6	3/4" ø HEADED 4"	411
PATCH PLATES	PP1	10	2'-3"x 8"x 1/2"	ST 400
	PP2	18	3"x 3"x 1/2"	ST 400

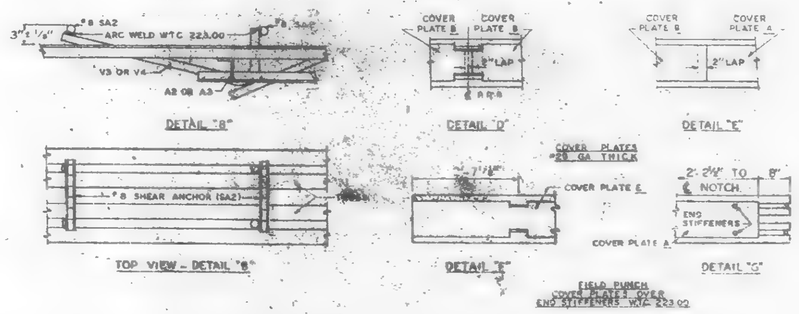
(1) ALL ARC WELD TO BE MADE WITH LOW HYD. IRON RODS IN THE E-70 SERIES OR EQUAL.

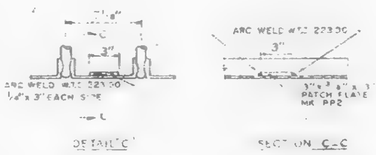
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

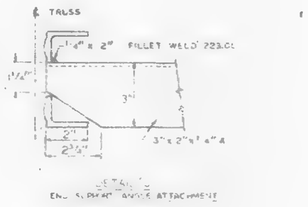












NO	DATE	REVISION
1	8-18-88	AS NOTED

REF. DRWGS.

T-AB2-11	7-22-87
T-AB3-11	10-15-88
T-AB4-11	1-3-89
T-AB4 (SA-F,30)	7-22-87
T-AB4 & 8,3	1-3-89
T-AB1-4	12-5-86
T-AB1-3	7-22-87
T-AB1-8,7,8B	7-22-87

FIELD PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

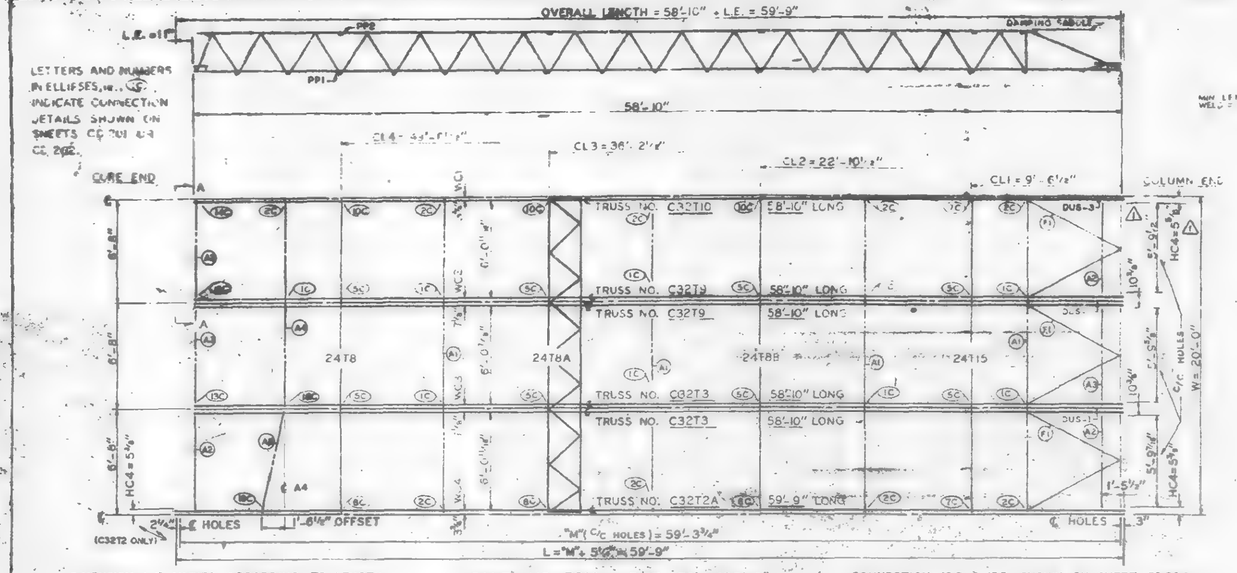
BLDG. A FLOORS 74 (N)

PANEL EIP 20'-0" x 57'-7"

BLDG. B FLOORS 74 (WEST)

FABRICATION BY	LACLEDE STEEL COMPANY		
FABRICATED AT	MADISON, ILLINOIS	DESIGN DRAWING NO.	T-AB2-11
APPROVED FOR FABRICATION BY	James Wheeler DATE 1/4/90	DRAWN BY	gdc
APPROVED FOR FABRICATION BY	DATE	DATE	NOV. 4, 1988
FOR FABRICATOR		CHECKED BY	T.M.CHUNG
DETAILED BY	CHECKED BY	DATE	NOV. 4, 1988
		FABRICATION CONTRACT NO.	221

SHEET NO. EIP

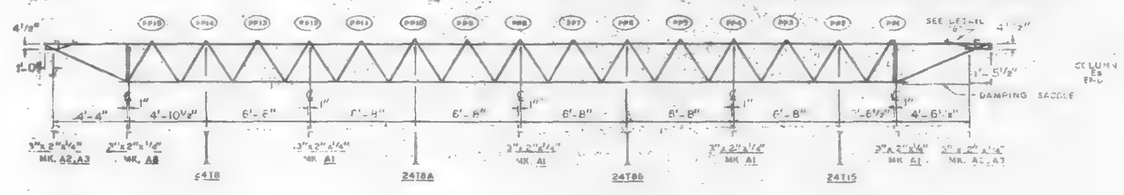


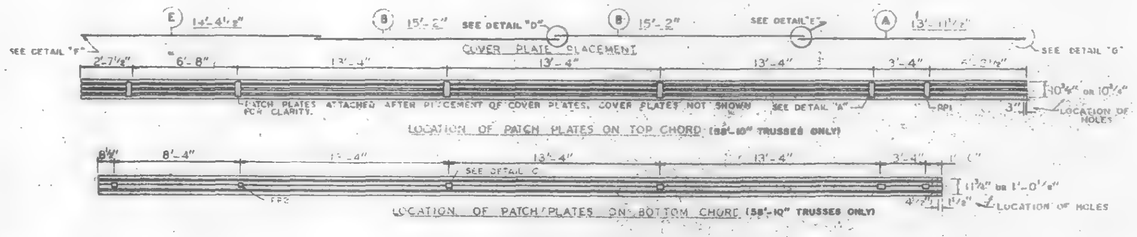
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

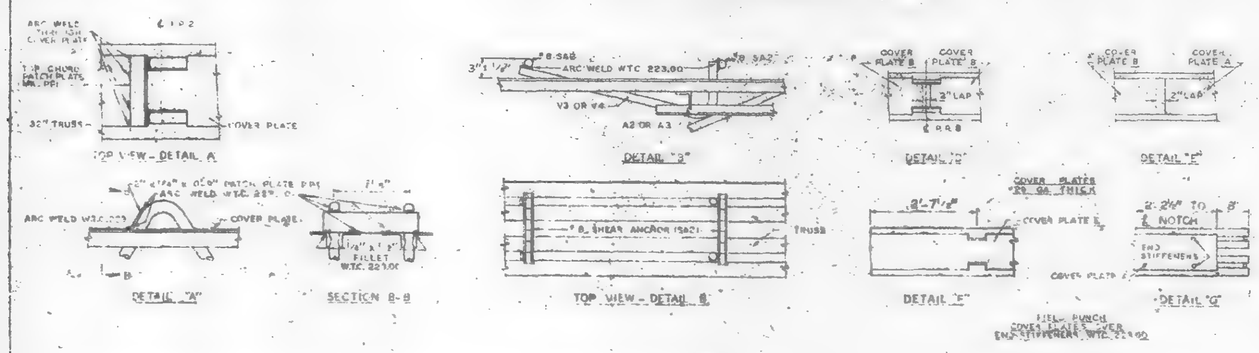
PANEL NO. ERIA SIZE 20' x 59'-9"

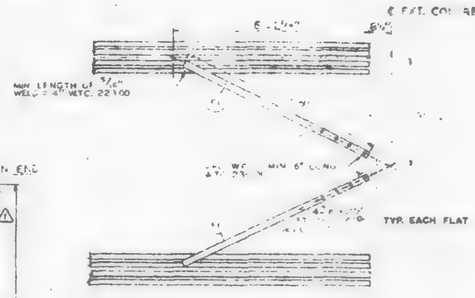
CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

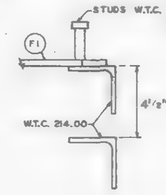
LETTERS AND NUMBERS IN ELLIPSES, ie. (5) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 & CD 202.











CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

TOP CHORD	T3	1	58'-10"	ST 203
	T6	1	58'-10"	T 208
	T7	1	58'-10"	T 210
BOTTOM CHORD	T8	1		208
	T8A	1		208A
	T8B	1		208B
	T15	1	15	215
3"x 2"x5/16" ANGLE	A2	4		
	A3	4		
	A4	1	3"x2"x 5/16" x 13'-3"	ST 403
	-B	1	3"x 2"x 5/16" x 6'-8 5/8"	ST 435
DIAGONAL FLATS	F1	6	1'-8 1/2" x 8 1/2" x 8'-8"	ST 402
	A	2	8" x 1 3/4" x 5/16" x 8'-8"	ST 703
	B	2	8" x 1 3/4" x 5/16" x 8'-8"	ST 703
COVER PLATES	L	3	1'-8" x .0135" = 14'-6 5/8"	ST 401
ANGLE CLIPS	C1	20	3" x 3" x 5/16" x 8"	ST 401
	C2	4	3" x 3" x 5/16" x 8"	ST 401
DAMPING SADDLE		2	3" x 3" x 5/16" x 3'-0"	ST 418
CONNECTION BAR	CB1	1	3/16" x 6" x 1'-3"	
	CB2	6	3/16" x 6" x 1'-5"	
CONNECTION PLATES	P1	5	3'-2" x 3 1/8" x 8'-8"	ST 401
	P2	1	4'-2" x .39" x 0'-9"	
	P3	1	4'-2" x .39" x 1'-0"	
	P5	3	4'-2" x 7/16" x 1'-6"	400
	P8	1	4'-2" x .39" x 0'-9"	ST 401
7/8 SHEAR ANCHOR	SA2	8	7/8 SHEAR x 0'-9"	ST 400
PATCH PLATES	PP1	18	3" x 4" x 0'-9"	ST 401
	PP2	18	3" x 3" x 1'-0"	ST 401

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

NO.	DATE	REVISION	BY
2	6-19-68	AS NOTED	G.D.C.
1	9-19-68	AS NOTED	T.M.C.

2 WAS (A) WAS 0 7-22-68
12 10-15-68
A2 68
16 & 39 7-22-68
A3 & 3 10-15-68
6-19-68
3 7-22-68
A1, 0, 7 A8 7-22-68

FLOOR PANEL DETAILS
FOR
NORTH TRADE CENTER N.Y.C.
BY
PORT OF N.Y.A. N.J.

BLDG. A FLOORS 1-4 & 7-14 (SOUTH & SOUTH-EAST) 59'-10 5/8" (NORTH) PANEL ERIA

BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 19-58.6" 2

WORTHINGTON

JAMES W. WHITE 12
JULY 22, 1968
ED ERIA

L.E. = 58'-11"

LETTERS AND NUMBERS IN ELLIPSES (i.e. (1C)) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 207 OR CD 208

OVERALL LENGTH = 58'-10" + L.E. = 58'-11"

CAMBER DIAGRAM

PP2

PP1

58'-10"

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/2"

CL2 = 22'-10 1/2"

CL1 = 9'-6 1/2"

SKEW END

A

W.C.1

W.C.2

W.C.3

W.C.4

6'-8"

6'-0"

6'-0 1/2"

6'-0 5/8"

6'-5 3/8"

TRUSS NO. C32T10 (1C) 58'-10" LONG

TRUSS NO. C32T9 (1C) 58'-10" LONG

TRUSS NO. C32T9 (1E) 58'-10" LONG

TRUSS NO. C32T3 (1E) 58'-10" LONG

TRUSS NO. C32T3 (1E) 58'-10" LONG

TRUSS NO. C32T2G (1C) 58'-1" LONG

24T8

24T8A

24T8B

24T15

DUS-3

DUS-1

COLUMN END

HC4 = 5 3/4"

10 5/8"

5'-5 1/2"

5'-0"

C/C HOLES W = 2'-0"

2 1/4" ℄ HOLES

1" OFFSET

3"

℄ HOLES

(C32T2 ONLY)

"M" (C/C HOLES) = 58'-5 3/4"

L = "M" + 5 1/2" = 58'-11"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIG SIZE 20' x 58'-11"

CONNECTION 18C & 19C SHOWN ON SHEET CD 206. SPECIAL CONNECTIONS 13C, 15C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

4 1/2"

SKEW END

PP10 PP11 PP12 PP13 PP14 PP15 PP16 PP17 PP18 PP19 PP20 PP21 PP22 PP23 PP24 PP25 PP26 PP27 PP28 PP29 PP30 PP31 PP1

SEE DETAIL 18C

COLUMN END

CAMBER DIAGRAM

4'-4" 4'-10 1/2" 6'-6" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-6 1/2" 4'-6 1/2"

3"x 2"x 1/4" MK. A2, A3

2"x 2"x 1/4" MK. A8

3"x 2"x 1/4" MK. A1

3"x 2"x 1/4" MK. A4

3"x 2"x 1/4" MK. A1

3"x 2"x 1/4" MK. A2, A3

24T8

24T8A

24T8B

24T15

E 14'-4 1/2"

B 15'-6" SEE DETAIL "D"

B 15'-2" SEE DETAIL "E"

A 13'-11 1/2"

SEE DETAIL "C"

SEE DETAIL "C"

COVER PLATE PLACEMENT

2'-7 1/2" 6'-8" 13'-4" 13'-4" 13'-4" 9'-4" 6'-7 1/2"

PPZ

PITCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN SEE DETAIL "B"

LOCATION OF PATCH PLATES ON TOP CHORD 58'-10" TRUSSES ONLY

LOCATION HOLES

8 1/2" 8'-4" 13'-4" 13'-4" 13'-4" 3'-6"

A SEE DETAIL "B"

PPZ

LOCATION OF PATCH PLATES ON BOTTOM CHORD 58'-10" TRUSSES ONLY

1'-1 1/4" TO 1'-0"

LOCATION OF HOLES

4 1/2"

ARC WELD CAP OR LIVES PLATE

TOP CHORD SPLICE PLATE MK. PP

36" TRUSS

COVER PLATE

TOP VIEW - DETAIL "A"

ARC WELD WTC 223.00

COVER PLATE

PP

FILLET WTC 223.00

SECTION B-B

ARC WELD WTC 223.00

A2 OR A3

DETAIL "B"

TOP VIEW - DETAIL "B"

COVER PLATE B

COVER PLATE B

LAP

DETAIL "D"

COVER PLATE B

COVER PLATE A

LAP

DETAIL "E"

COVER PLATES

C/L OF TRUSS

2'-7 1/2"

COVER PLATE B

1" SHEAR ANCHOR (S2.2)

TRUSS

DETAIL "F"

2'-2" TO 1'-8"

L NOTCH

STIFFENERS

COVER PLATE A

DETAIL "G"

F.R.C. PUNCH END SILL FENDERS WTC 223.00

ARC WELD WTC 223.00 (4) 3" EACH SIDE

7" C

C

DETAIL "C"

3"

ARC WELD WTC 223.00

PATCH PLATE MK. PP2

SECTION C-C

AT EXT. COL. REF. LINE

6"

8 1/2"

MIN. LENGTH OF 1/4" WELD = 4" W.T.C. 223.00

(F1)

6'-6"

MK. A8 FILLET MIN. 6" LONG W.T.C. 210.50

4 1/2" W.T.C. 214.00

TYP. EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END INSULATED TRUSS BRACES PLACED OVER BEARING W.T.C. 223.00

STUDS W.T.C. 230.00

(F1)

4 1/2"

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN. CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL	MK.	QTY.	SIZE	WT.
FLOOR TRUSSES	T2G	1	C32T2G - 58'-1"	ST 202G
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRACING TRUSSES	T8	8	24T8 - 18'-11"	ST 208
	T8A	1	24T8A - 18'-11"	ST 208A
	T8B	1	24T8B - 19'-1"	ST 208B
	T15	1	24T15 - 19'-1"	ST 215
3" x 2" x 1/4" ANGLE	A2	4	3" x 2" x 1/4" x 5'-0"	ST 403
	A3	-	3" x 2" x 1/4" x 5'-4"	ST 403
	A4	1	3"x2" x 1/4" x 13'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-8"	ST 405
DIAGONAL FLATS	F1	6	1" x 4" x 2'-8" - 6'-8"	ST 402
COVER PLATES	A	2	5/16" x 20 1/2" x 3'-10 1/2"	ST 1A3
	B	8	5/16" x 20 1/2" x 15'-8"	ST 3B3
	C	8	5/16" x 20 1/2" x 14'-0 1/2"	ST 1C2
ANGLE CLIPS	C1	20	3" x 1 1/2" x 4" x 0'-8"	ST 400
	C2	4	3" x 1 1/2" x 4" x 0'-8"	ST 400
RAMP TO SADDLE	RA1	2	3" x 1 1/2" x 3" x 1'-3"	ST 298
	RA2	1	3" x 2 1/2" x 3" x 1'-3"	ST 298
CONNECTION PAD	PP1	1	1" x 4" x 3"	ST 400
	PP2	4	3/4" x 6" x 1'-3"	ST 400
	PP3	6	1/2" x 8" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 8 1/2"	ST 402
	P2	1	4 1/2" x .30" x 0'-6"	ST 400
	P3	1	4 1/2" x .30" x 1'-0"	ST 400
	P5	3	3 1/2" x 1/4" x 1'-6"	ST 400
	P6	1	4 1/2" x .39" x 0'-8"	ST 401
6" SHEAR ANCHOR	SA2	6	1" S. STUD x 0'-3"	ST 900
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 3/4" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-7C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/2" x 1" FULL THROAT FILLET.

A = 1/4" B = 1/4"

NO.	DATE	REVISION	BY
2	6-19-69	AS NOTED	G.D.C.
1	9-19-68	AS NOTED	T.N.C.

2 REF. DRAWINGS

1-442-3 & 10	7-22-68
1-442-12	10-15-68
1-A84-1	1-3-68
1-A84-1, 16 & 38	7-22-68
1-A84-42 & 3	10-15-68
SA-1203	6-69
1-A84-3	7-22-68
1-A84-6, 7 & 8	7-22-68

FLOOR TRUSS DETAILS

FOR 2 STORY TRUSS JOISTED FLOOR SYSTEM

BLDG. A FLOORS 10-11, 39 (NORTH) 39-40 (SOUTH) 2

TRUSS SPAN = 58'-11"

BLDG. B FLOORS 39 (EAST & WEST) 40 (EAST) 2

FABRICATED BY [redacted] STEEL, MCANY

FABRICATED [redacted], WISCONSIN

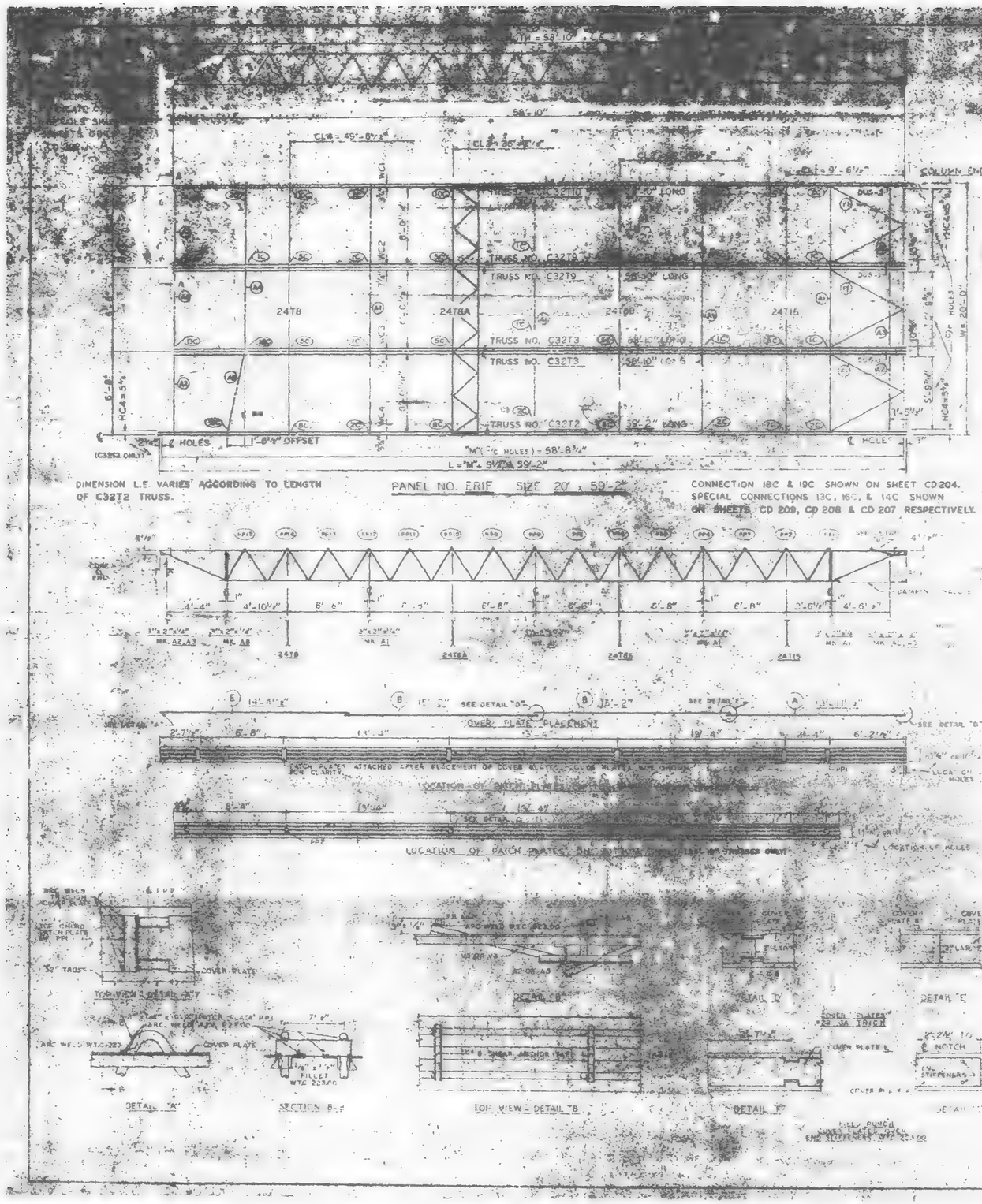
DRAWN 7/12

CHECKED James Wilcox 12/12

APPROVED [redacted] DATE JULY 29, 1968

BY [redacted] FOR FABRICATOR

[redacted] SCALE 22 FF-ERIG



REQUIRED MATERIAL FOR 1 PANEL				DET.
MATERIAL	MK	PCS	SIZE	DWG.
FLOOR TRUSSES	T2F	1	C32T2F - 59-2"	ST 205F
	T2	2	C32T - 58'-10"	ST 205
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3"x 2"x¼" ANGLE	A1	4	3" x 2" x ¼" x 19'-9"	ST 403
	A2	6	3" x 2" x ¼" x 5'-11⅝"	ST 403
	A3	2	3" x 2" x ¼" x 5'-11⅝"	ST 403
	A4	1	3" x 2" x ¼" x 19'-3"	ST 403
	A5	1	3" x 2" x ¼" x 6'-8"	ST 405
DIAGONAL FLATS	F1	6	1½" x 8" x 6'-8"	ST 402
	A	3	9" x .0135" x 13'-11"	ST 103
[illegible]	[illegible]	8	[illegible]	[illegible]
ANGLE CLIPS	C1	20	3" x 2" x ¼" x 6"	ST 401
	C2	4	3" x 2" x ¼" x 8"	ST 401
ANGLE CAP	[illegible]	8	[illegible]	[illegible]
CONNECTION PLATES	P1	6	3" x 2" x 8" x 8"	ST 401
	P2	3	4" x 3" x 10" x 0'-9"	ST 401
CONNECTION PLATES	P3	1	4" x 2" x 3'-10" x 0'-10"	ST 401
	P5	3	4" x 2" x 3'-10" x 0'-9"	ST 401
	P8	6	4" x 2" x 3'-6" x 0'-9"	ST 401
¾ SHEAR ANCHOR	SA2	6	¾" x 8" x 10"	ST 420
PATCH PLATES	PP2	16	3" x ¼" x 0'-10"	ST 401
	PP3	4	3" x ¼" x 0'-8"	ST 401

(1) ALL ARC WELD TO BE MADE WITH LOW HY. ELECTRODES IN THE E-70 SERIES OR EQU.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

NO	DATE	REVISION	BY
1	6 19 69	AS NOTED	GJ

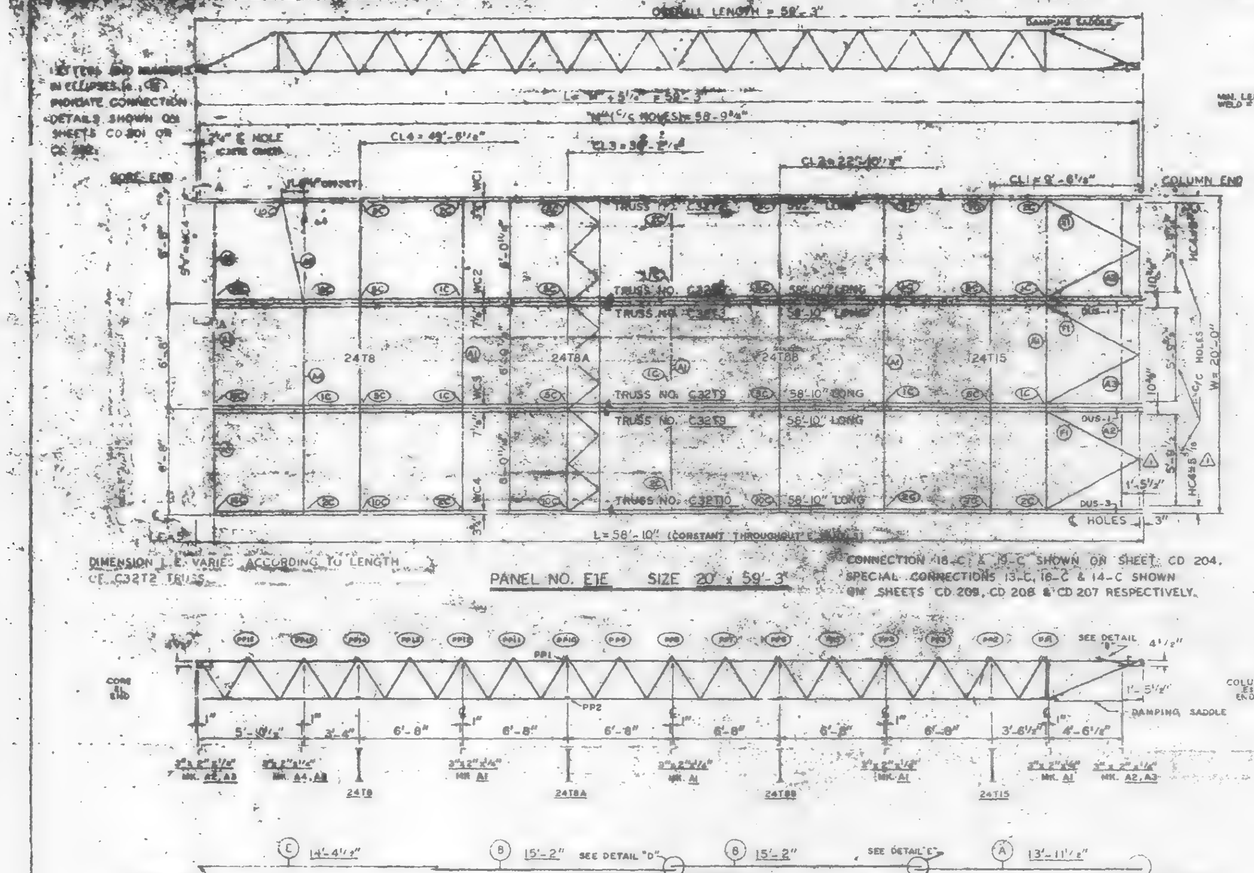
[illegible]

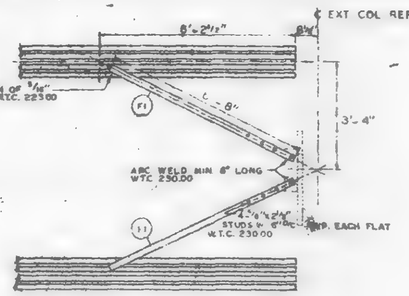
47-48, 70-71 (N)

BLDG. B FLOORS 47-48, 70-71 (WEST) 1

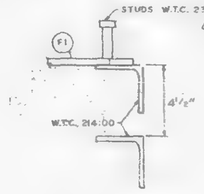
James White 1/2/70

[illegible] ERIF





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

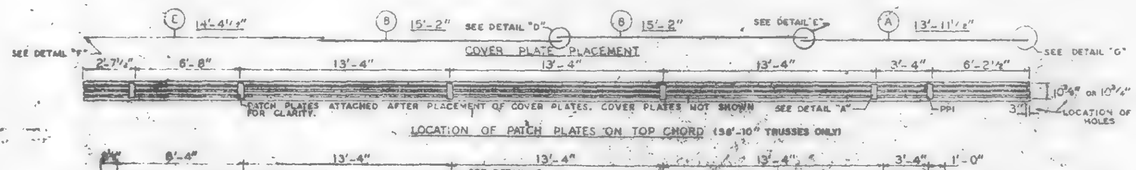


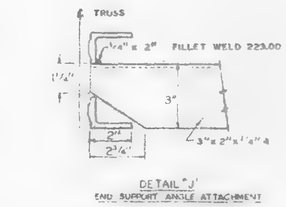
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	PCS	SIZE	
FLOOR JOISTS	T2E	1	C32T2E - 58'-3"	ST 202E
	T3	2	C32T3 - [illegible]	ST 203
	T9	2	C32T9 - [illegible]	ST 209
	T10	2	C32T10 - [illegible]	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 1/2"	ST 403
	A4	1	3" x 2" x 1/4" x 11'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-8 1/2"	ST 403
DIAGONAL FLATS	F1	6	1" x 3/8" x 2'-8"	ST 402
COVER PLATES	A	3	8" x .0135" x 13'-11 1/2"	ST 303
	B	8	8" x .0135" x 15'-2"	ST 303
	E	3	8" x .0135" x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	70	2" x 1 1/2" x 3 1/2" x 0'-8"	ST 401
	C2	4	2" x 1 1/2" x 3 1/2" x 6"	ST 401
DAMPING SADDLE	DUS-1	2	3" x 3 1/2" x 3/16" x 3'-0"	ST 228
	DUS-3	1	3" x 3 1/2" x 3/16" x 6'-0"	ST 228
CONNECTION BAR	CB1	1	1" @ x 1'-3"	ST 400
	CB2	3	1" @ x 1'-3"	ST 400
	CB3	6	1" @ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3" x 3/8" x [illegible]	ST 400
	P2	1	4" x 1 1/4" x 11'-6"	ST 400
	P3	1	4" x 1 1/4" x [illegible]	ST 400
	P5	3	4" x 1 1/4" x 1'-6"	ST 400
	P7	1	4" x [illegible]	ST 400
7/8 SHEAR CONNECTOR	SAP	[illegible]	7/8 SHEAR x [illegible]	[illegible]
PATCH PLATES	PP1	18	2" x 4" x 0'-2"	ST 400
	PP2	18	3" x 3/8" x [illegible]	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" MIN. THROAT FILLET.

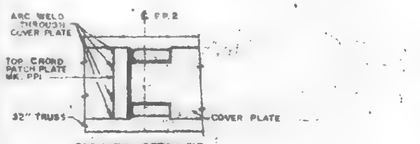




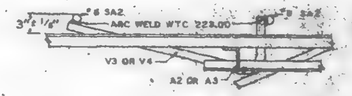
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	BY
2	5-18-69	AS NOTED	[illegible]
1	9-19-68	AS NOTED	[illegible]

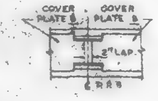
(2) SEE DRWGS [illegible]



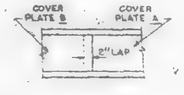
TOP VIEW - DETAIL "A"



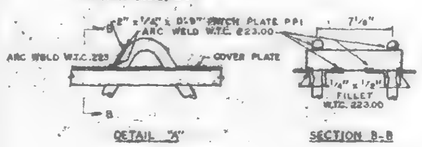
DETAIL "B"



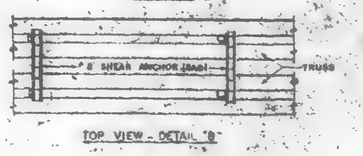
DETAIL "D"



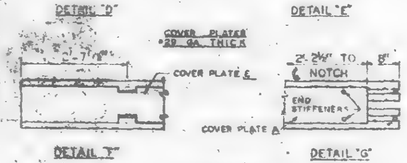
DETAIL "E"



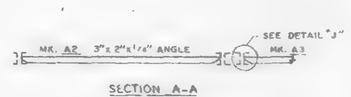
DETAIL "A" SECTION B-B



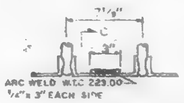
TOP VIEW - DETAIL "B"



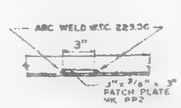
DETAIL "I" DETAIL "G"



SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



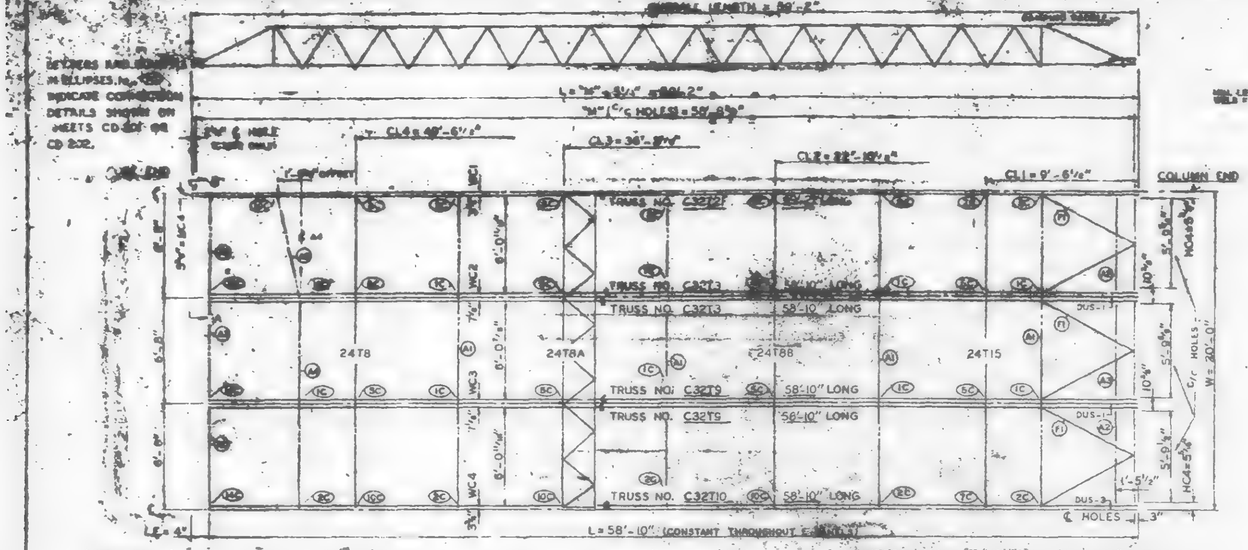
SECTION C-C

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 10-11 (NORTH & SOUTH)
69 (NORTH) PANEL E1E - 20'-0" x 59'-3"

FABRICATION BY LACLEDE STEEL COMPANY

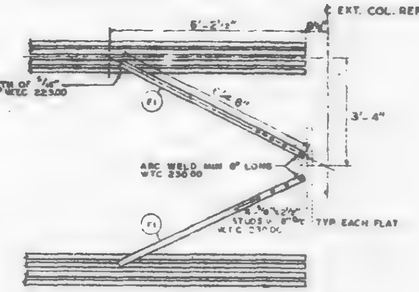
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83-11	PLATE
APPROVED FOR FABRICATION BY James Lowder	DATE 11/12/70	DRAWN BY [illegible] DATE JULY 22 '68
APPROVED FOR FABRICATION	DATE	CHECKED BY [illegible] DATE JULY 22, 1968
RETAINED BY A. GARY MEBER		SCALE [illegible] SHEET NO. FP E1E



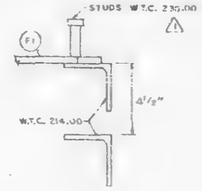
DIMENSION L1 VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1F SIZE 20' x 59'-2"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

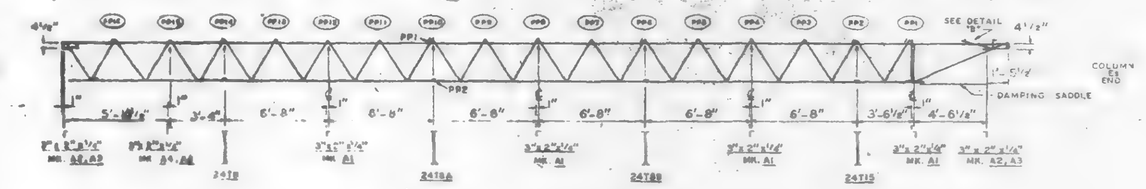


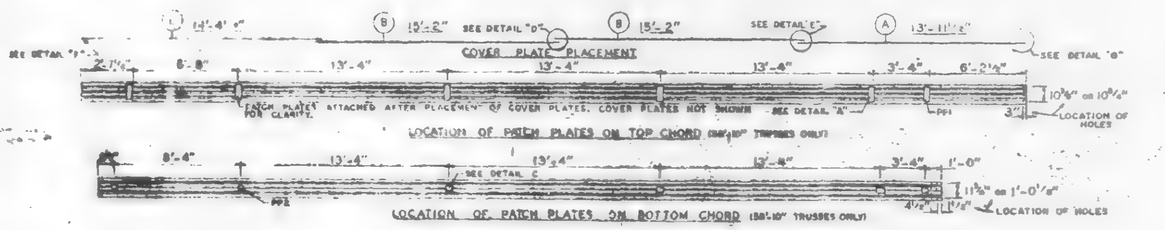
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

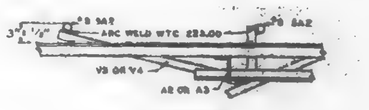
REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK.	PCS.	SIZE	DRWG
FLOOR TRUSSES	T2F	1	C32T2F - 59'-2"	ST 202F
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T5	1	C32T5 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 8
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 9'-10"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-10"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-10"	ST 403
	A4	1	3" x 2" x 1/4" x 19'-2"	ST 403
	A5	1	3" x 2" x 1/4" x 61'-0"	ST 403
DIAGONAL FLATS	F1	2	1/4" x 5" x 6'-8"	ST 402
COVER PLATES	A	3	9" x 20.39" x 19'-2"	ST 303
	B	6	9" x 20.39" x 19'-2"	ST 303
	C	3	9" x 20.39" x 14'-4"	ST 303
FILLER PLATES	C1	2	9" x 1/4" x 5'-4" x 0'-8"	ST 403
	C2	4	9" x 1/4" x 5'-4" x 1'-4"	ST 403
AMPING SADDLES	D1	2	3" x 3" x 1/4" x 3'-0"	ST 208
	D2	2	3" x 3" x 1/4" x 1'-6"	ST 208
CONNECTION PLATES	E1	1	9" x 5" x 1/4"	ST 301
	E2	6	9" x 5" x 1/4"	ST 301
CONNECTION PLATES	F1	5	3" x 5" x 1/4"	ST 402
	F2	1	6" x 5" x 1/4"	ST 402
	F3	1	6" x 5" x 1/4"	ST 402
	F4	1	4" x 5" x 1/4"	ST 402
	F5	1	4" x 5" x 1/4"	ST 402
	F6	1	4" x 5" x 1/4"	ST 402
3/8 SHEAR ANCHORS	A2	6	3/8" x 2" x 6"	ST 404
PATCH PLATES	P1	10	9" x 2" x 1/4"	ST 404
	P2	18	9" x 2" x 1/4"	ST 404

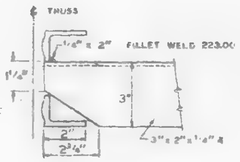
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

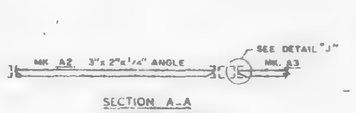
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET

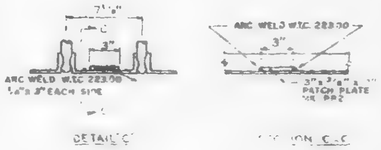












NO.	DATE	REVISION	BY
1	6-18-68	AS NOTED	DDC

ELEV. CHANGE		
	MARK 35	7-22-68
	MARK 1	7-15-68
	MARK 2	1-3-68
	MARK 4 & 39	7-22-68
	MARK 40 & 3	7-15-68
	MARK 24	5-68
	MARK 3	7-68
	MARK 6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47-48, 70-71 (N) — PANEL E1F - 20 x 59'-2"

BLDG. B FLOORS 47-48, 70-71 (WEST) 1

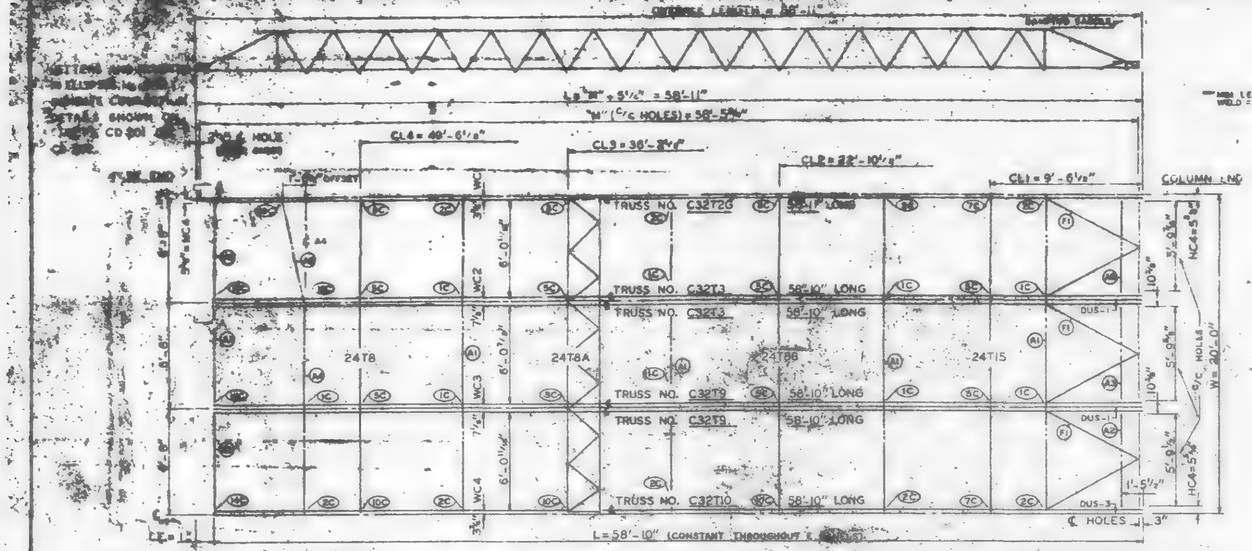
FABRICATION BY LAMSON TEES YARNALL

FABRICATED AT MADISON, ILLINOIS — SHOP DRAWING NO. A

APPROVED FOR FABRICATION BY James Winter — DATE 11/20 — DRAWN BY [illegible] — DATE NOV. 1, 1968

APPROVED FOR FABRICATION BY TOP FABRICATOR — DATE [illegible] — CHECKED BY [illegible] — DATE NOV. 4, 1968

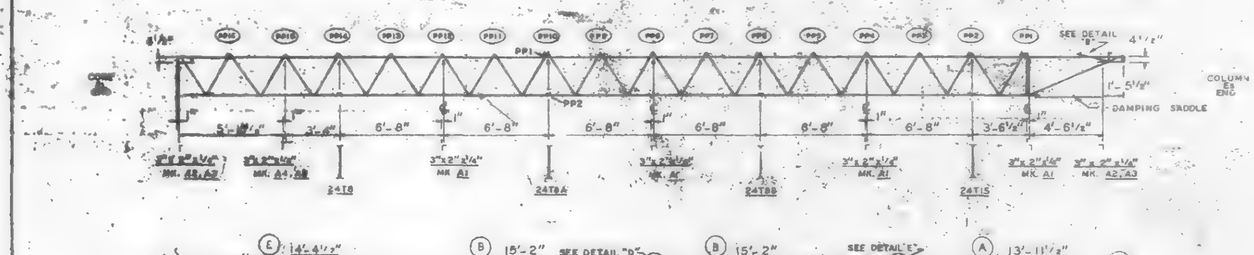
DETAILED BY [illegible] — FABRICATOR CONTROL NO. 22 — SHEET E1F

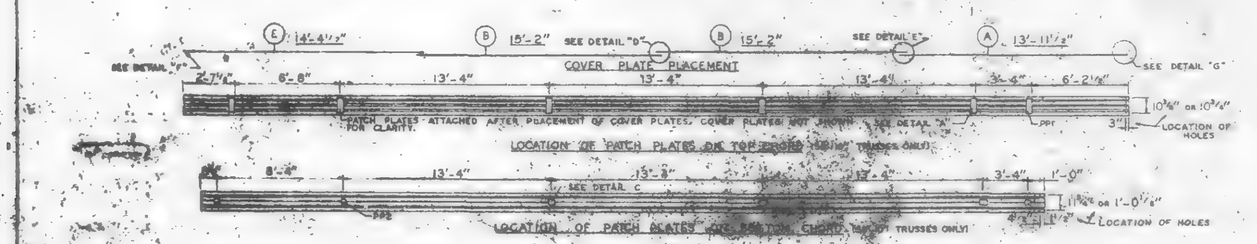


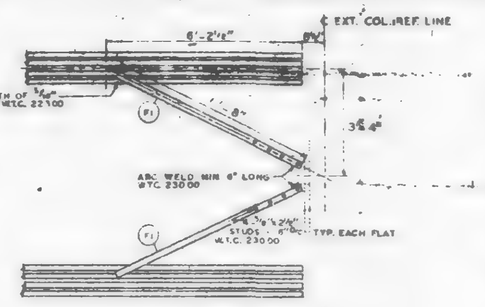
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1G SIZE 20' x 58'-11"

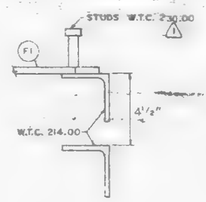
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.







TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 228.00

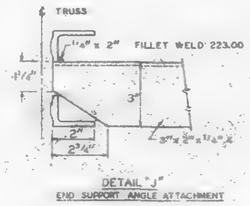


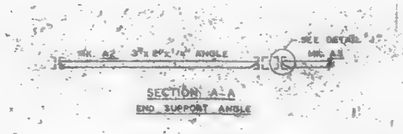
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-5" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

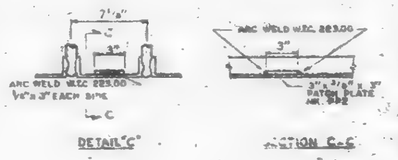
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG
FLOOR TRUSSES	T2G	1	C32T2G - 58'-11"	ST 2020
	T3	5	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 208
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11"	ST 403
	L4	1	3 x 2 x 1/4" x 1'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-5"	ST 435
DIAGONAL FLATS	FL	6	11" x 3" x 6'-8"	ST 402
COVER PLATES	A	3	8" x .0135" x 13'-11"	ST 303
	B	6	8" x .0135" x 15'-2"	ST 303
	C	3	8" x .0135" x 14'-6"	ST 303
ANGLE CLIPS	C1	20	2" x 2" x 3/16" x 0'-8"	ST 400
	C2	4	2" x 1 1/2" x 3/16" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-3"	ST 208
	DUS-3	1	3" x 3" x 3/16" x 3'-0"	ST 208
CONNECTION BAR	CB1	1	1" x 1" x 1'-3"	ST 400
	CB2	8	1" x 1" x 1'-3"	ST 400
	CB3	8	1" x 1" x 1'-5"	ST 400
CONNECTION PLATES	PF1	5	3" x 1/2" x 1'-0"	ST 400
	PF2	1	4" x 3/8" x 1'-9"	ST 400
	PF3	1	4" x 3/8" x 1'-0"	ST 400
	PF5	3	4" x 1/4" x 1'-6"	ST 400
	PF	1	4" x 3/8" x 6'-9"	ST 401
"8 SHEAR ANCHOR"	SA2	6	1" ø HEADED x 0'-4"	ST 414
PATCH PLATES	PP1	18	2" x 1" x 8'-9"	ST 400
	PP2	18	3" x 3/8" x 10'-7"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. 40XX ELECTRODES RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULE THROAT FILLET.







NO.	DATE	REVISION	O.D.C. BY
1	6-18-69	AS NOTED	

REF. DRWGS.

7-AB2-3 & 10	7-22-68
7-AB3-11	10-15-68
7-AB4-3,1	1-3-68
7-AB4-15 & 16, 38	7-22-68
7-AB4-42 & 3	10-13-68
SA-124	1-6-69
7-AB1-2	7-22-68
7-AB1-6,7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 39-40 (N&S)
PANEL E1G - 20' x 58'-11"
BLDG. B FLOORS 39-40 (EAST & WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 AB3-11	PLATE
APPROVED FOR FABRICATION BY: [illegible] FOR FABRICATOR	DATE 12/10	DRAWN BY: gdc DATE NOV. 1, 1968	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY T.N. CHURA DATE NOV. 4, 1968	IN CHARGE OF PROD. DEV.
DETAILED BY LACLEDE STEEL CO.		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. EP-E1G

LETTERS AND NUMBERS IN ELLIPSES, e.g. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202.

OVERALL LENGTH = 59'-8 1/2"

DAMPING SADDLE

L = "M" = 59'-8 1/2"

59'-8 1/2" (C TO C HOLES)

2 3/4" ℄ HOLE (C32T2 ONLY)

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/8"

CL2 = 22'-10 1/8"

CL1 = 9'-6 1/2"

CORE END

1'-6 1/2" OFFSET

COLUMN END

TRUSS NO. C32T2B 59'-3 1/2" LONG

TRUSS NO. C32T3 58'-10" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T10 58'-10" LONG

24T8B 24T8A 24T8B 24T15

HC1 HC2 HC3 HC4 HC4=5'-9"

WC1 WC2 WC3 WC4

DUS-1 DUS-2 DUS-3

HOLES W=6'-0"

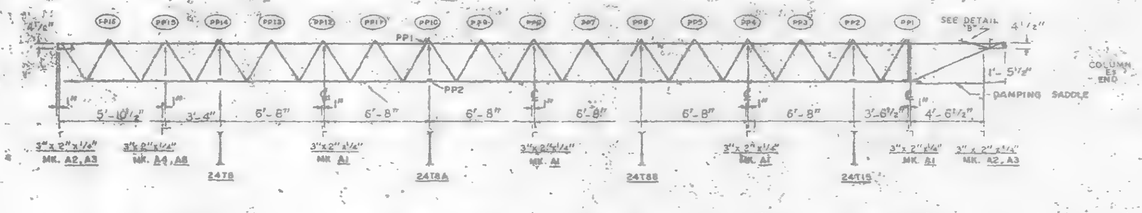
L = 58'-10" (CONSTANT THROUGHOUT E. PANEL)

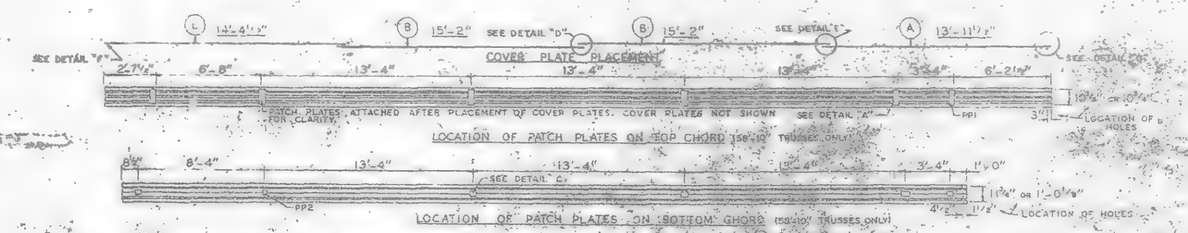
℄ HOLES

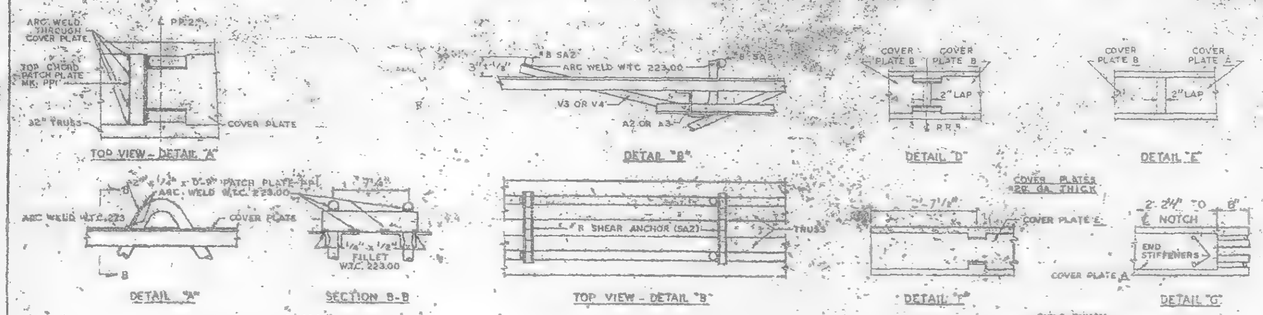
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

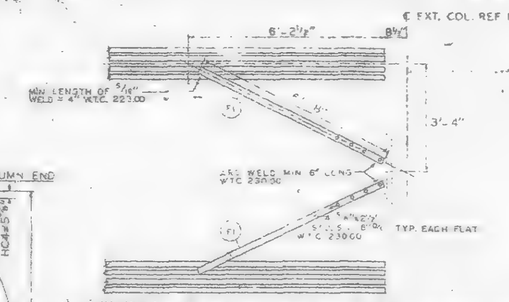
PANEL NO. E1B SIZE 20' x 59'-8 1/2"

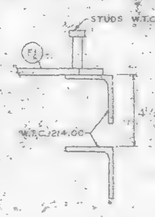
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.









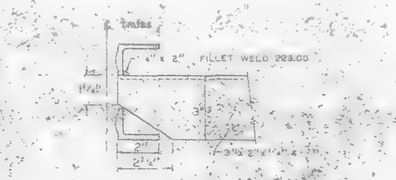


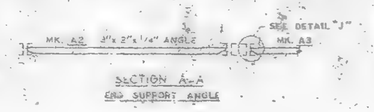
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED			STEEL	
MATERIAL	MK.	QTY.	SIZE	
FLOOR TRUSSES	T2B	1	32T2B - 59'-8 1/2"	ST 202B
	T3	2	C32T3 - 58'-10"	ST 202
	T9	2	C32T9 - 58'-10"	ST 202
	T10	2	C32T10 - 58'-10"	ST 202
BRIDGING TRUSSES	TA	1	24T8A - 19'-11"	ST 202A
	TAC	1	24T8A - 19'-11"	ST 202A
	TB	1	24T8B - 19'-11"	ST 202B
	TAS	1	24T15 - 19'-11"	ST 202
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 5'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11"	ST 403
	A4	1	3" x 2" x 1/4" x 5'-11"	ST 403
	A8	1	3" x 2" x 1/4" x 5'-11"	ST 403
DIAGONAL FLATS	F1	1	12" x 1/2" x 6'-9"	ST 402
COVER PLATES	A	3	0" x 0.179" = 15'-11 1/2"	ST 303
	B	5	8" x 0.135" = 15'-2"	ST 303
	C	3	0" x 0.135" = 14'-4 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 2" x 1/4" x 0'-6"	ST 400
	C2	2	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3 1/2" x 3'-0" - 31.8 LBS.	ST 298
	DUS-3	1	3/16" x 3 1/2" x 2'-6" - 13.0 LBS.	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	3/4" ϕ x 1'-3"	ST 400
	CB3	8	3/4" ϕ x 1'-5"	ST 400
CONNECTION PLATES	F1	5	31 1/2" x 12 1/2" x 1/4"	ST 400
	F2	1	41 1/2" x 39" x 1/2"	ST 400
	F3	1	41 1/2" x 39" x 1'-0"	ST 400
	F5	3	41 1/2" x 17 1/2" x 1'-6"	ST 400
	F6	1	41 1/2" x 39" x 2'-0"	ST 401
"B" SHEAR ANCHOR	SA2	8	7/8" ϕ HEADED x 0'-8"	ST 415
PATCH PLATES	PP1	18	2" x 1'-6" x 0'-8"	ST 400
	PP2	18	3" x 3/4" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. 10 DGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.





NO	DATE	REVISION	BY
1	6-18-69	AS NOTED	G.A.C.

REF. DRWGS.

7-A82-3 & 11	7-22-68
7-A83-11	10-15-68
7-A84-3, 11	1-3-68
7-A84-15 & 16-38	7-22-68
7-A84-42 & 3	10-15-68
SK-124	1-6-69
7-A81-3	7-22-68
7-A81-6, 7 & 8	7-22-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

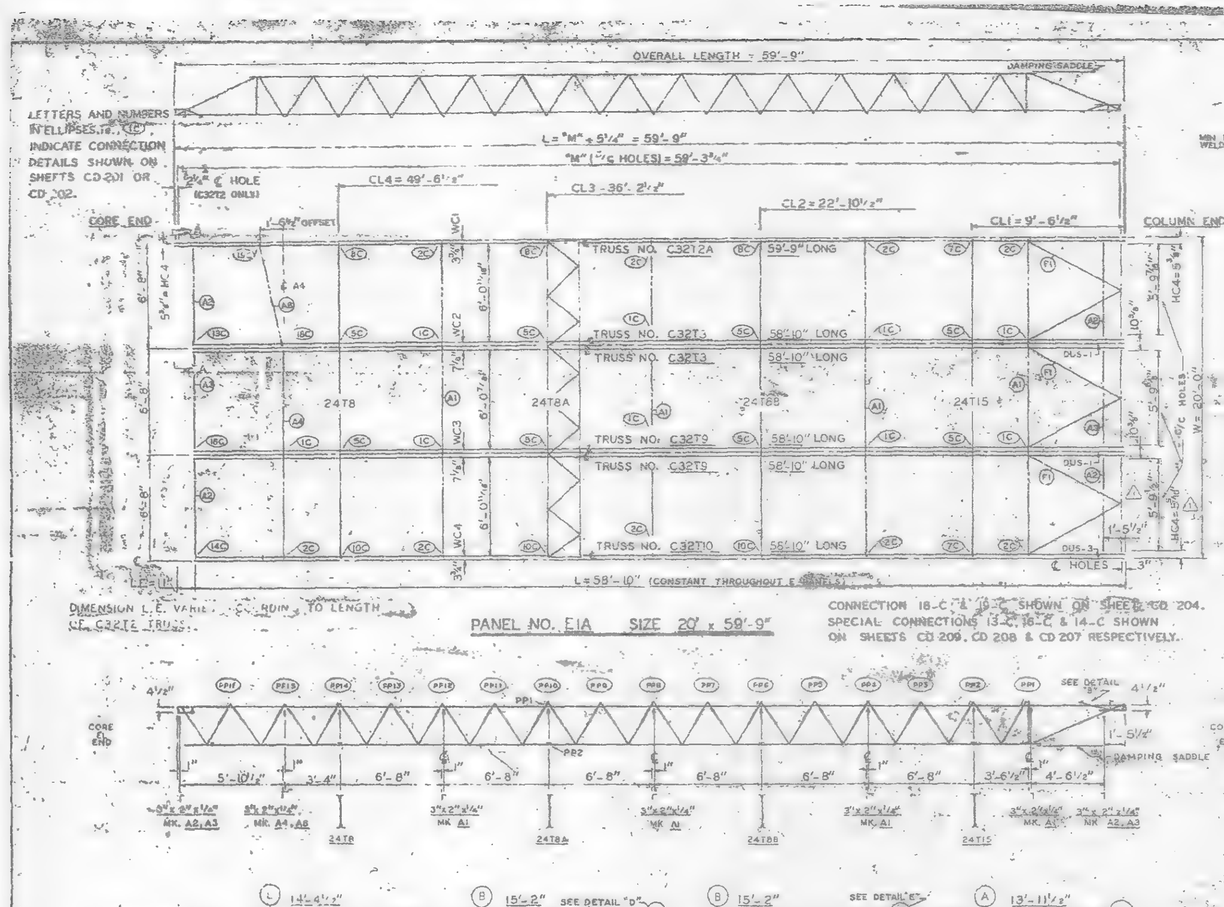
BLDG. A FLOORS 84-91, 93-106 (N)

PANEL E1B - 20'-0" x 59'-8 1/2"

BLDG. B FLOORS 84-91, 93-106 (WEST)

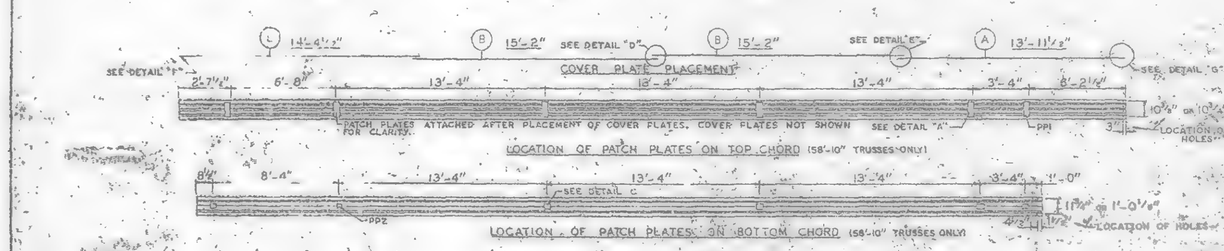
FABRICATION BY LACLEDE STEEL COMPANY

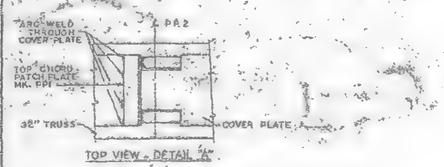
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-11	P. O. NO.
APPROVED FOR FABRICATION BY James Work P.E. N.Y.A.	DATE 11/2/70	DRAWN BY GAC	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	DATE NOV. 1, 1968	SCALE
DETAILED BY [illegible]		CHECKED BY J.M. CHURA	OR CHECKING NO.
		DATE NOV. 4, 1968	PROJ. DES.
		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. E1 E1B

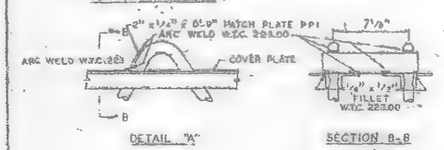


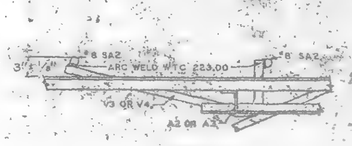
PANEL NO. E1A SIZE 20' x 59'-9"

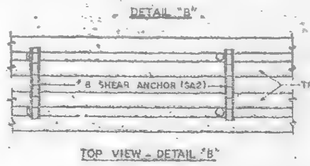
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.

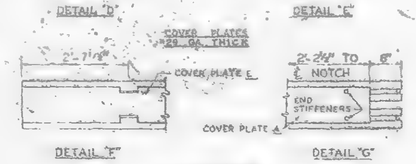




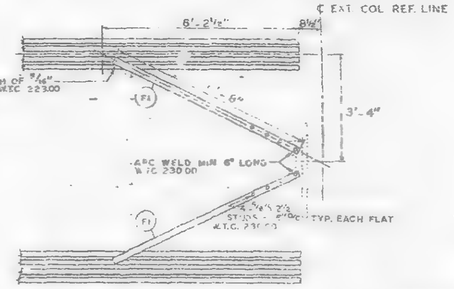


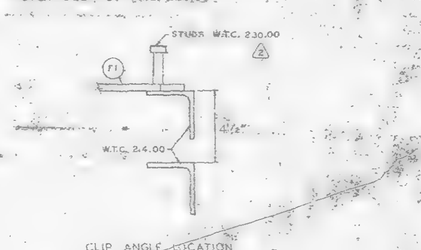


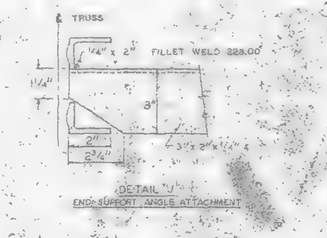


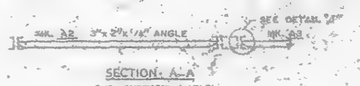


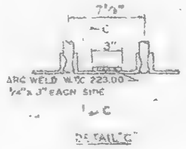
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

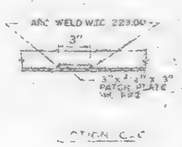












REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T2A	1	C32T2A - 59'-9"	ST 202A
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-2"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 401
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"	ST 402
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 402
	A4	1	3" x 2" x 1/4" x 6'-7"	ST 404
	A8	1	3" x 2" x 1/4" x 6'-7"	ST 404
DIAGONAL FLATS	F1	6	6" x 1/4" x 1'-0"	ST 401
COVER PLATES	A	2	9" x .0135" x 13'-11"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 305
	E	3	9" x .0135" x 14'-6"	ST 305
ANGLE CLIPS	C1	20	2" x 2" x 1/4" x 0'-8"	ST 400
	C2	4	2" x 1" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3/4" x 3" x 3" x 3'-6"	ST 298
	DUS-3	1	3/4" x 3" x 3" x 6'-6"	ST 298
CONNECTION BAR	CB1	1	1" x 6" x 1'-3"	ST 400
	CB2	6	1" ø x 1'-3"	ST 400
	CB3	6	1" ø x 1'-8"	ST 400
CONNECTION PLATES	P1	5	3/4" x 3" x 6'-1"	ST 400
	P2	1	1/4" x 3" x .39" x 4'-4"	ST 400
	P3	1	1/4" x 3" x .39" x 4'-0"	ST 400
	P5	3	1/4" x 3" x 4'-6"	ST 400
	P7	1	1/4" x 3" x 2'-0"	ST 401
8 SHEAR ANCHOR	SA2	6	8 SHEAR x 0'-9"	ST 401
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	19	3" x 3/4" x 0'-3"	ST 400

(1) ALL SHOP WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUIV.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

NO	DATE	REVISION	BY
2	6-16-69	AS NOTED	T.R.C.
1	9-12-68	AS NOTED	T.R.C.

2 REF. DRWGS.

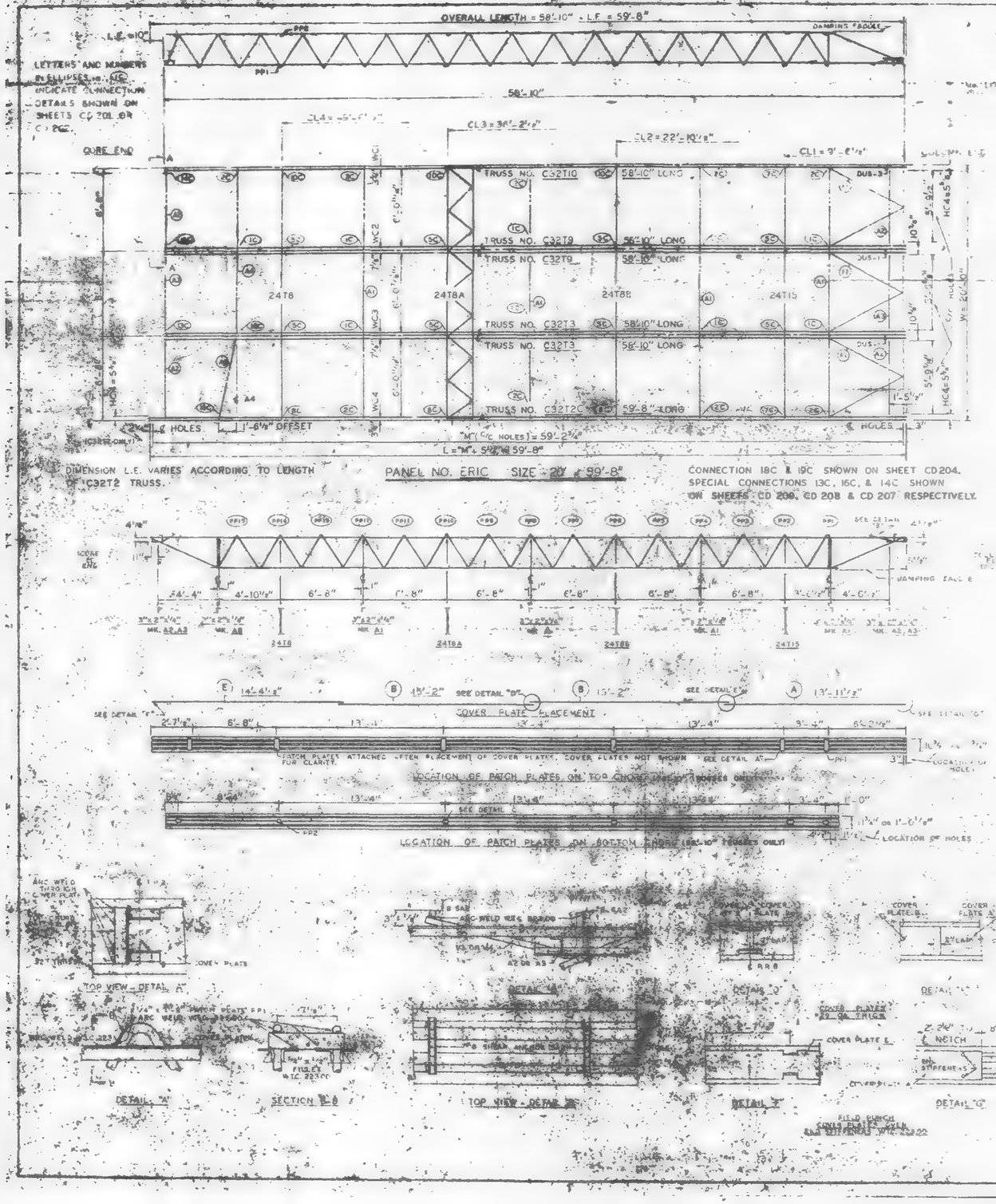
7-A82-34	7-22-68	
7-A83-11	10-15-68	
7-A84-3	1-3-69	
7-A84-15	7-22-68	
7-A86-42	10-15-68	
8A-124	1-5-69	
7-A81-3	12-22-68	
7-A81-7	7-22-68	

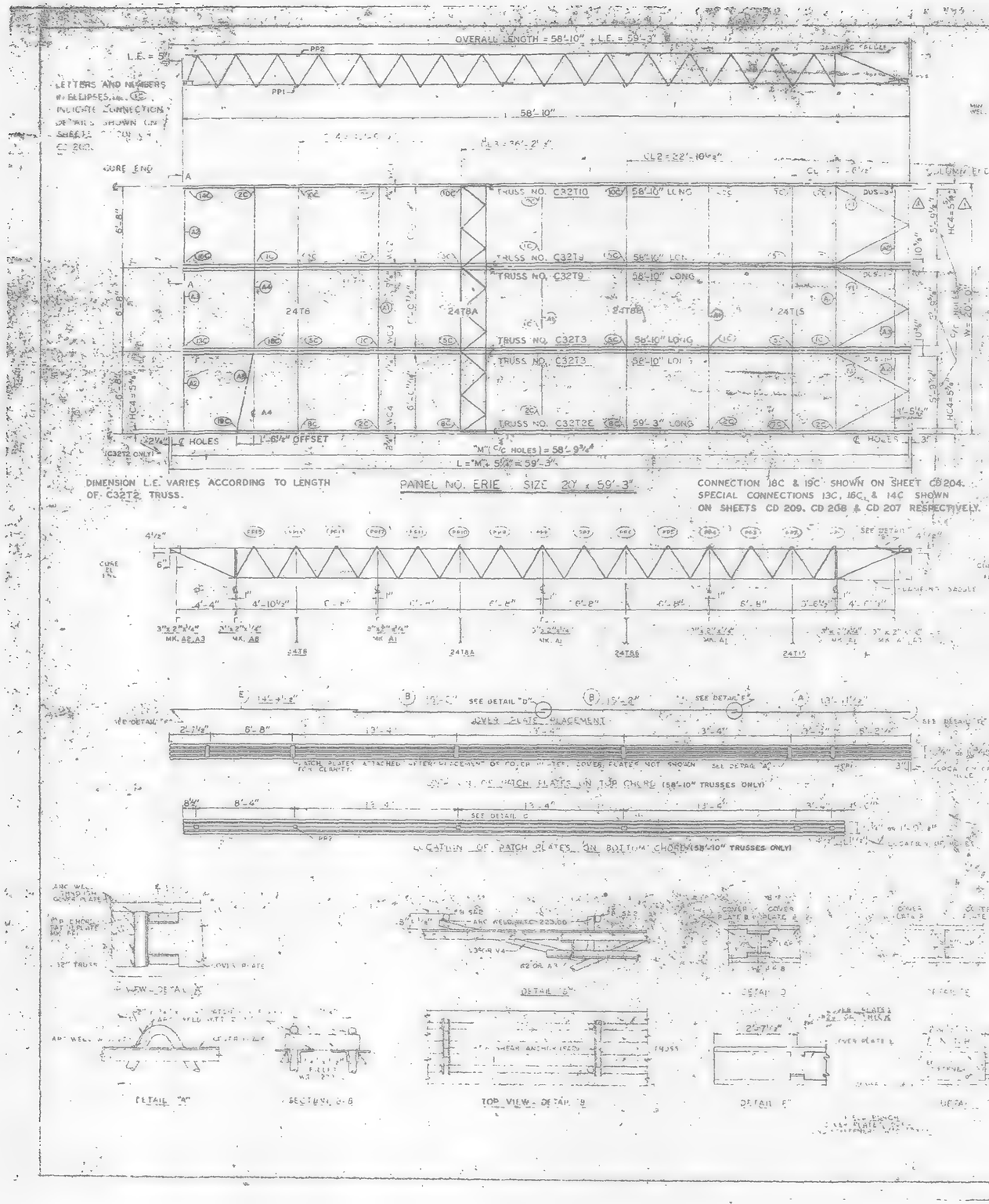
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 12-24, 26-38 (WEST & SOUTH) 43-58, 60-66, 68, 69 (NORTH) — PANEL E1A - 20' x 59'-9" — (1) (2)

BLDG. B FLOORS 14-24, 26-38 (EAST & WEST) 40-65 (1) (2)

FABRICATION BY LACLEDE STEEL COMPANY		DESIGN DRAWING NO. T-A83-11	PLATE
FABRICATED AT MADISON, ILLINOIS		DRAWN BY A.G.	
APPROVED FOR FABRICATION BY PORT OF N.Y.A.	DATE 11-15-68	DATE JULY 12, 1968	
APPROVED AS NOTED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JULY 22, 1968	
DF-1		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. 1A


OVERALL LENGTH = 58'-10" + L.E. = 59'-8"
L.E.=10"
LETTERS AND NUMBERS IN ELLIPSES NEC INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202
CORE END
DAMPING TABLE
PP1
PP2
58'-10"
CL4 = 49'-6" ±
CL3 = 34'-2½"
CL2 = 22'-10⅛"
CL1 = 3'-6⅛"
TRUSS NO. C32T10 58'-10" LONG
TRUSS NO. C32T8 58'-10" LONG
TRUSS NO. C32T9 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T3 58'-10" LONG
TRUSS NO. C32T2C 59'-8" LONG
DUS-3
DUS-1
24T8
24T8A
24T8B
24T15
WC1
WC2
WC3
WC4
HC=5'-4"
HC=5'-8"
HC=5'-9"
HC=5'-10"
HC=5'-11"
HC=6'-0"
HC=6'-1"
HC=6'-2"
HC=6'-3"
HC=6'-4"
HC=6'-5"
HC=6'-6"
HC=6'-7"
HC=6'-8"
HC=6'-9"
HC=6'-10"
HC=6'-11"
HC=7'-0"
HC=7'-1"
HC=7'-2"
HC=7'-3"
HC=7'-4"
HC=7'-5"
HC=7'-6"
HC=7'-7"
HC=7'-8"
HC=7'-9"
HC=7'-10"
HC=7'-11"
HC=8'-0"
HC=8'-1"
HC=8'-2"
HC=8'-3"
HC=8'-4"
HC=8'-5"
HC=8'-6"
HC=8'-7"



MARK	SIZE	LENGTH	WEIGHT
3" 2"x¼" ANGLE	A3	58'-10"	203
	A2	58'-10"	209
	A	58'-10"	210
	A1		208
	A4		208A
	A8		208B
	A5		215
DIAGONAL FLAT	F1	1'-8" x 5'-8" x .8	ST 402
COVER PLATE	B	6'-3" x 15'-8" x .81	ST 403
	E	3'-2" x 13'-3" x .81	ST 403
ANGLE CLIPS	C1	2" x 3½" x 1'-0"	ST 405
	C2	2" x 3½" x 1'-3"	ST 405
JUMPING CA ANGLE	JA	3" x 3" x 1'-0"	ST 405
	JA3	3" x 3" x 1'-3"	ST 405
CONNECTION PAD	CB1	1'-0" x 1'-0" x .75	ST 400
	CB2	1'-3" x 1'-0" x .75	ST 400
	CB3	1'-5" x 1'-0" x .75	ST 400
CONNECTION PLATES	P1	3'-8" x 1'-8" x .81	ST 403
	P2	4'-2" x .38" x 0'-8"	ST 400
	P3	4'-2" x .38" x 1'-0"	ST 400
	P5	4'-2" x 1'-2" x .75	ST 400
	P6	4'-2" x .38" x 0'-8"	ST 400
⅞ SHEAR ANCHOR	SA2	⅞ Ø HEADED 0'-9"	ST 400
PATCH PLATES	PP1	2" x 1'-4" x 0'-9"	ST 400
	PP2	3" x 1'-6" x 1'-0"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-7C SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.

A = ¼"
B = ⅛"

NO.	DATE	REVISION	BY
2	6-19-69	AS NOTED	G.D.C.
1	9-19-68	AS NOTED	T.M.C.

MARK	DATE
3" x 3" x 10	7-22-68
8" x 12	10-15-68
24T4	7-22-68
24T6 & 16 & 29	7-22-68
24T5 & 8 & 3	10-15-68
24T1	11-6-68
24T8 3	7-22-68
24T1, 5, 7 & 8	7-22-68

LETTERS AND NUMBERS IN ELLIPSES (A1, A2, ETC.) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202

OVERALL LENGTH = 58'-10"

58'-10"

CL1 = 22'-10"

CL2 = 22'-10"

TRUSS NO. C32T10 58"-10" LONG

TRUSS NO. C32T9 58"-10" LONG

TRUSS NO. C32T8 58"-10" LONG

TRUSS NO. C32T3 58"-10" LONG

TRUSS NO. C32T2J 58'-7" LONG

24T8 24T8A 24T8B 24T8S

22½" ø HOLES 1'-6½" OFFSET ø HOLES

"M" (C/C HOLES) = 58'-1¾"

L = M + 5½" = 58'-7"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS

PANEL NO. ERIU SIZE 20' x 58'-7"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 208, CD 208 & CD 207 RESPECTIVELY

SEE DETAIL

LAMPING ALLOWANCE

4T8 24T8A 24T8B 24T8S

MK. A2, A3 MK. A8 MK. A1 MK. A1 MK. A1 MK. L

SEE DETAIL "D"

VEE PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

LOCATION OF HOLES

TYP. EACH FLAT

STUDS W.T.C. 230.00

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MARK	QUANTITY	SIZE	LENGTH	WEIGHT
	1			
	1		58'-10"	203
	3		58'-10"	209
	1		58'-10"	210
	1		58'-11"	208
T8A	1		9'-11"	ST 208A
T8S	1		9'-11"	ST 208B
T1L	1		12'-11"	ST 215
3½"x2½"x¼" ANGLE	4		5'-2½"	ST 403
	3		5'-2½"	ST 403
	A4	1	13'-3"	ST 403
	A5	1	6'-6"	ST 405
DIAGONAL PLATE	F1	1	1'-8" x 6'-8"	ST 402
	F2	1	1'-8" x 6'-8"	ST 402
GUSSET PLATES	B	8	0.0135" x 15'-2"	ST 303
	E	3	5/16" x 0.0188" x 14'-4½"	ST 303
ANGLE CLIPS	C1	20	2½"x2½"x¼"x 1'-6"	ST 401
	C2	4	2½"x2½"x¼"x 6"	ST 401
CAMBER BAR	CB	1	1½" x 3" x 58'-10"	ST 208
	CB1	1	1½" x 3" x 58'-10"	ST 208
CONNECTION BAR	CB	1	1" x 9" x 1'-3"	ST 401
	CB1	1	1" x 9" x 1'-3"	ST 401
	CB	6	1" x 6" x 1'-3"	ST 400
CONNECTION PLATES	P1	5	3'-2½" x 3/8" x 8½"	ST 400
	P2	1	4'-2½" x .30" x 0'-9"	ST 400
	P3	1	4'-2½" x .39" x 1'-0"	ST 400
	P5	3	4'-2½" x 1/4" x 6"	ST 400
	P6	1	4'-2½" x .30" x 0'-9"	ST 401
⅞ SHEAR ANCHOR	SA2	6	⅞ STUD x 0'-4½"	ST 400
PATCH PLATES	PP1	18	2½" x ¼" x 0'-9"	ST 400
	PP2	18	2½" x ¼" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET

A = ¼"
B = ¼"

ARC WELD (UNDERSIDE) COVER PLATE

TOP CHORD (ON PLATE) SPLICE

⅜" TACKS

COVER PLATE

TOP VIEW - DETAIL "A"

⅞ SAS

ARC WELD W.T.C. 223.00

W3 OR W4

A2 OR A3

DETAIL "B"

COVER PLATES

COVER PLATE

⅞ SAS

DETAIL "C"

COVER PLATES

COVER PLATE

DETAIL "D"

COVER PLATE

DETAIL "E"

COVER PLATE

L NOTCH

DETAIL "G"

TRUSS

2" FILLET WELD DETAIL

TAIL

ENL. SHEAR ANGLE ATTACHMENT

SEE DETAIL "J"

MK A2

SECTION A-A

END SHEAR ANGLE

ARC WELD WT. 227.70

SECTION B-B

ARC WELD W.T.C. 227.70

COVER PLATE

DETAIL "A"

2" OLD PATCH

ARC WELD W.T.C. 227.70

LEFT W.T. 227.70

SECTION B-B

⅞ SHEAR ANCHOR (SA2)

TOP VIEW - DETAIL "B"

COVER PLATE E

DETAIL "E"

COVER PLATES

L NOTCH

STIFFENERS

DETAIL "G"

ARC WELD W.T.C. 227.70

DETAIL "C"

ARC WELD WT. 227.70

SECTION A-A

NO.	DATE	REVISION	BY
△	6-19-69	AS NOTED	G.D.C

REF. DRWGS

7-48A 34.10	7-62-68
7-48B-12	10-15-68
7-48H-41	7-68
7-48 15,16 & 39	7-62-68
48A-42	10-15-68
58-124	1-6-69
48H-3	7-62-68
48H-6, 48	7-62-68

FLOOR FRAMING PLANS

FOR

ARMY TRADE CENTER

BLDG. A 40 (N)

BLDG. B FLOORS 40 (WEST) △

FABRICATED BY BUFFALO STEEL COMPANY

DESIGN DRAWING NO. 3

PROJECT NO. 68

DESIGN BY

DRAWN BY

CHECKED BY

DATE NOV 4 1968

FABRICATION COMPLETED

SHEET NO. 2 OF 3 SHEETS

FABRICATION COMPLETED

DATE

FP ER1U-2

LETTERS AND NUMBERS IN CIRCLES INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 OR CD 202

OVERALL LENGTH = 58'-1"

58'-10"

CL1 = 3'-2"

CL2 = 22'-10½"

CL3 = 3'-2"

TRUSS NO. C32T10 58'-0" LONG

TRUSS NO. C32T9 58'-10" LONG

TRUSS NO. C32T8 58'-10" LONG

TRUSS NO. C32T7 58'-10" LONG

TRUSS NO. C32T6 58'-6" LONG

24T8 24T8A 24T15

DUS-3

22¾" - 6 HOLES @ 4" OFFSET

"M" C/C HOLES = 58'-0¾"

L = 58'-5¾" = 58'-6"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. ERIK SIZE 20' x 58'-6"

CONNECTION 18C & 19C SHOWN ON SHEET CD204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 205, CD 206 & CD 207 RESPECTIVELY.

4'-0" 4'-10½" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6½" 4'-0"

4T8 24T8A 24T15

SEE DETAIL "D" SEE DETAIL "E"

LOCATION OF PATCH PLATES ON TOP CHORD (58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (58'-10" TRUSSES ONLY)

DETAIL "A" SECTION B-B TOP VIEW - DETAIL "B" DETAIL "F" DETAIL "G"

TYPICAL PLAN OF TOP CHORD SPLICE AND DIAGONAL FLATS BRACES PLACED PER DESIGN BY W.T.C. 220.00

STUDS W.T.C. 230.00

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4¼" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

SECTION A-A DETAIL "C" SECTION C-C

	T1	1	4T7	T	ST 206
	T8A	1	4T8A	T	ST 208A
	T8B	1	24T8	T	ST 208B
	T15	1	24T15	T	ST 215
3"x 2"x 6" ANGLES	A	4			ST 403
	A2	4			ST 403
	A3	2			ST 403
	A4	1	3"x2"x4"x13'-3"	ST 403	
	A5	1	3"x2"x4"x6'-8½"	ST 405	
DIAGONAL FLATS	F1	1	1"x 7"x 6'-8"	ST 402	
	A	3			ST 403
	B	8			ST 203
	L	3	9"x 3"x 14'-4½"	ST 203	
ANGLE CLIPS	C1	20	3½"x 3½"x 5"x 0'-8"	ST 401	
	C2	4	3½"x 1½"x 4"x 6"	ST 401	
DAMPING SADDLE	DUS-3	2	3"x 2½"x 2"x 2'-8"	ST 203	
	DUS-1	1	2½"x 2½"x 2"x 3'-8"	ST 203	
CONNECTION BAR	CB1	11	1"x 6"x 1'-3"	ST 400	
	CB2	2	½" x 6"x 1'-3"	ST 400	
	CB3	6	½" x 6"x 1'-5"	ST 400	
CONNECTION PLATES	P1	5	3'-2"x 1'-0"x ¼"	ST	
	P2	1	3'-2"x 39"x 0'-¼"	ST 400	
	P3	1	4'-8"x 39"x 1'-0"	ST 400	
	P5	3	4'-8"x 1'-6"x 1'-6"	ST 400	
	P8	1	2'-8"x 30"x 0'-8"	ST 401	
⅞ SHEAR ANCHOR	SA2	6	⅞ HEFAR x 0'-9"	ST 400	
PATCH PLATES	PB2	18	2"x 6"x 0'-8"	ST 400	
	PB3	18	3"x 3½"x 0'-3"	ST 400	

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN ELECTRODES IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

NO.	DATE	REVISION	BY
1	6-19-69	AS NOTED	GDC

REF. DWGS.

7-A42, 7A10	7-22-68
7-A43, 12	10-15-68
7-A84, 11	3-68
7-A84-1, 5, 6 & 39	7-22-68
7-A84-4, 2 & 3	10-15-68
SK 2124	6-69
7-A81-3	7-22-68
7-A81-6, 7 & 8	7-22-68

"ERECTION PANEL" DETAILS

FOR

7 AVE. GRADE CENTER

FOR THE NEW YORK AUTHORITY

BLDG. A FLOOR 45-46 (N)

PANEL ERIK 20' x 58'-6"

BLDG. B FLOORS 45-46 (WEST) ⚠

FABRICATION BY BETHLEHEM STEEL COMPANY

DRAWN BY J. AR. 12 10 FEB

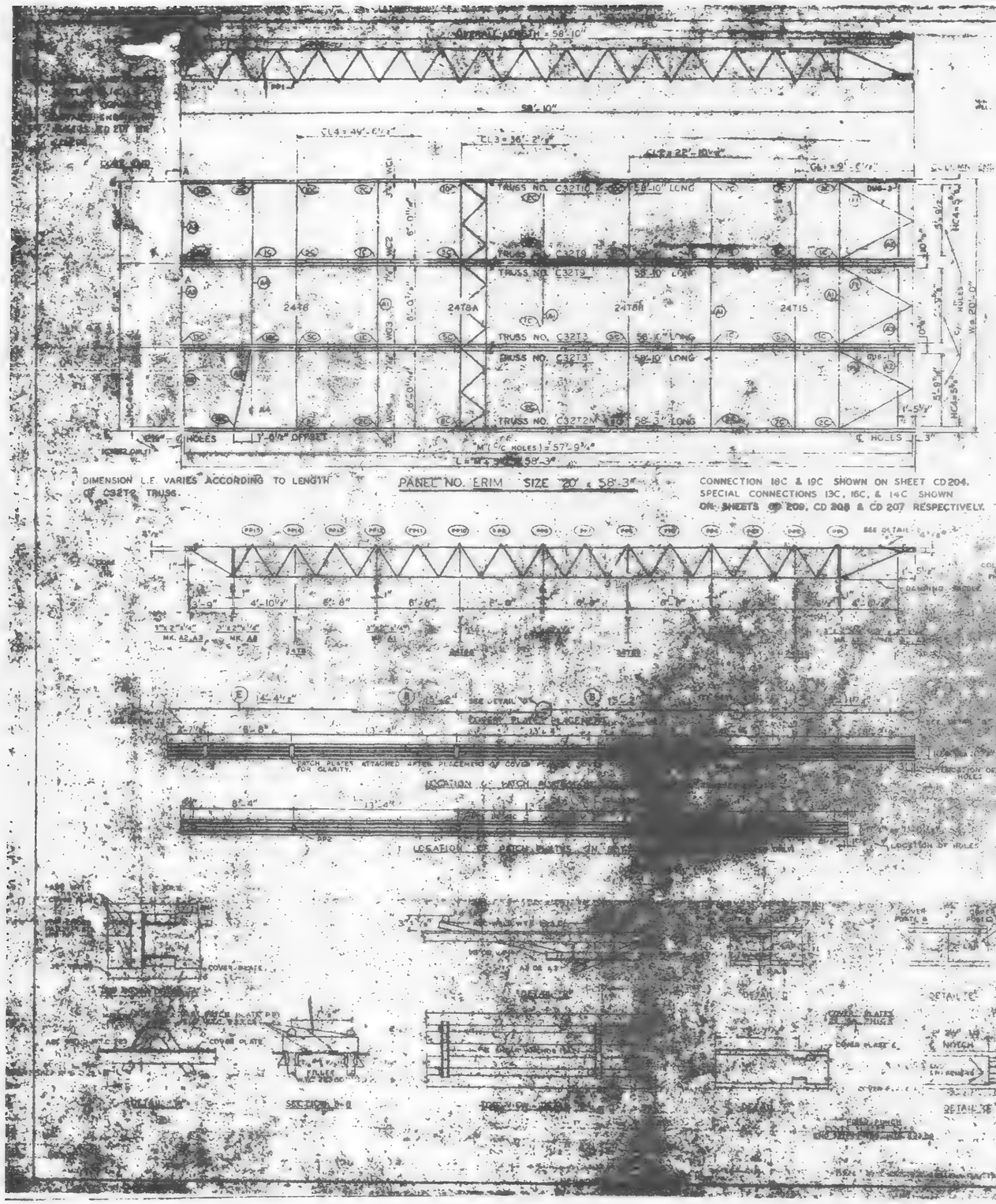
CHECKED BY NOV 4

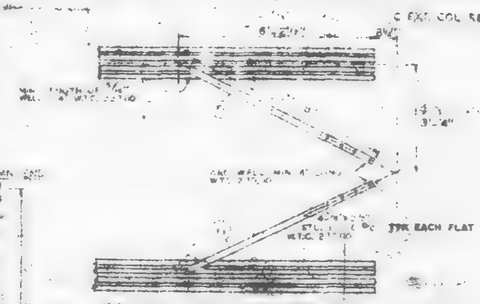
DATE NOV 5 1968

FABRICATION CONT. NO.

BETHLEHEM STEEL CO.

SHEET NO. CD ERIK





MARK	QUANTITY	SIZE	WEIGHT
T2M	1	C32T2M - 58'-3"	5,[illegible] CM
T3	1	C32T3 - 58'-10"	1,203
T9	1	C32T9 - 58'-10"	1,203
T10	1	C32T10 - 58'-10"	1,215
T6	1	24T6 - 9'-[illegible]"	1,208
T6A	1	24T6A - 9'-[illegible]"	1,208A
T6B	1	24T6B - 10'-[illegible]"	1,208B
T7C	1	24T7C - 9'-[illegible]"	1,215
A1	4	[illegible]	405
A2	2	[illegible]	[illegible]
A3	2	[illegible]	[illegible]
A6	1	3"x2"x1/4"x 1'-3"	ST 403
A8	1	3"x2"x1/4"x 2'-6"	ST 405
F1	6	1"x6"-0" to 6'-8"	ST 408
A	3	8"x 0.135"x 1'-11"	ST 303
B	6	8"x 0.135"x 1'-8"	ST 303
E	3	6"x 0.095"x 1'-8 1/2"	ST 304
C1	20	2"x2"x1/4"x 0'-8"	ST 400
C2	4	2"x2"x1/4"x 6"	ST 400
DMS-1	2	3"x3"x1/4"x 1'-6"	ST 288
DMS-3	1	3"x3"x1/4"x 1'-6"	ST 288
C1	1	1"x6"-3"	ST 400
CB2	6	1/4" @ 1'-3"	ST 400
CB3	8	1/4" @ 1'-5"	ST 400
P1	5	3'-2"x3"x3/8" to 6'-1"	ST 400
P2	1	4'-2"x .39"x 0'-8"	ST 400
P3	1	4'-2"x .39"x 1'-0"	ST 400
P5	3	4'-2"x 1/4"x 1'-6"	ST 400
P6	1	4'-2"x .39"x 0'-8"	ST 400
8 SHEAR ANCHOR	CA2	6	8 HEADED x 0'-9"	ST 400
PATCH PLATES	PP1	18	2"x 1/4"x 0'-9"	ST 400
	PP2	18	3"x 1/4"x 0'-9"	ST 400

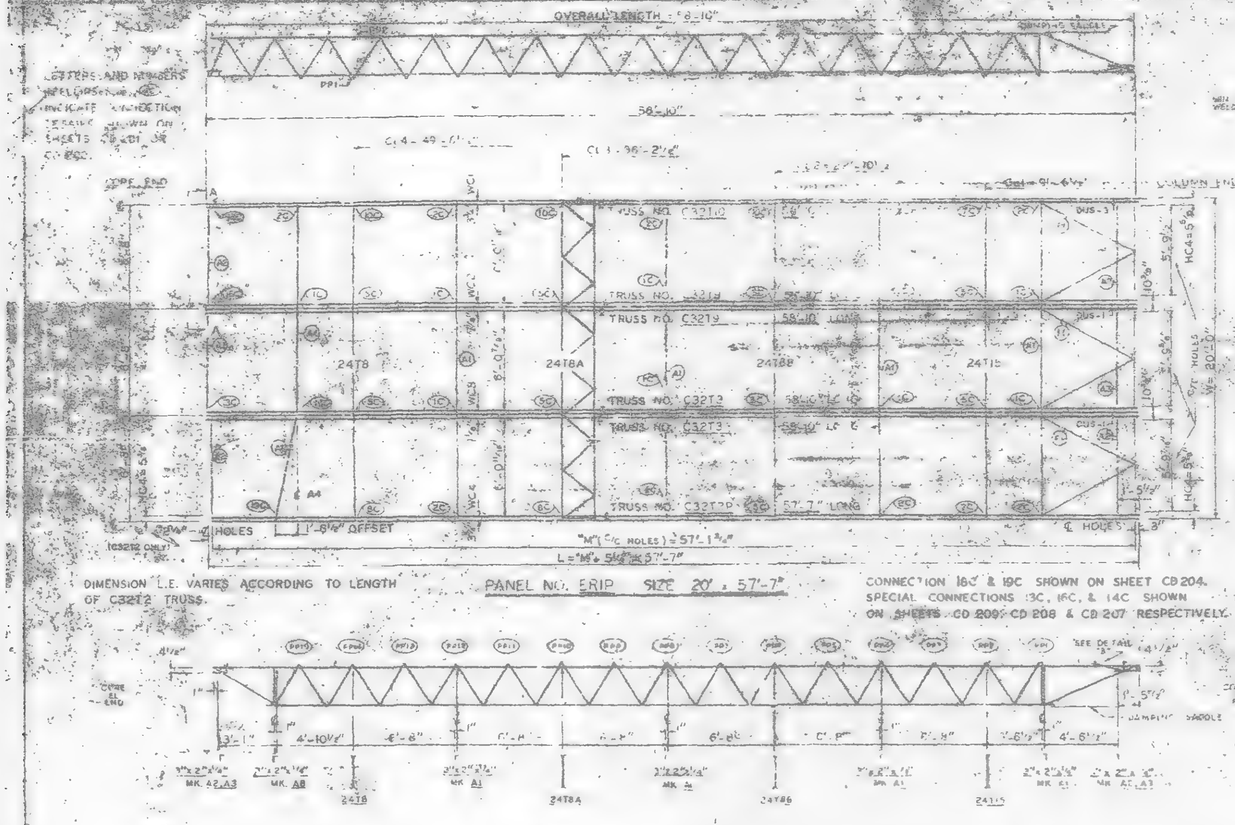
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

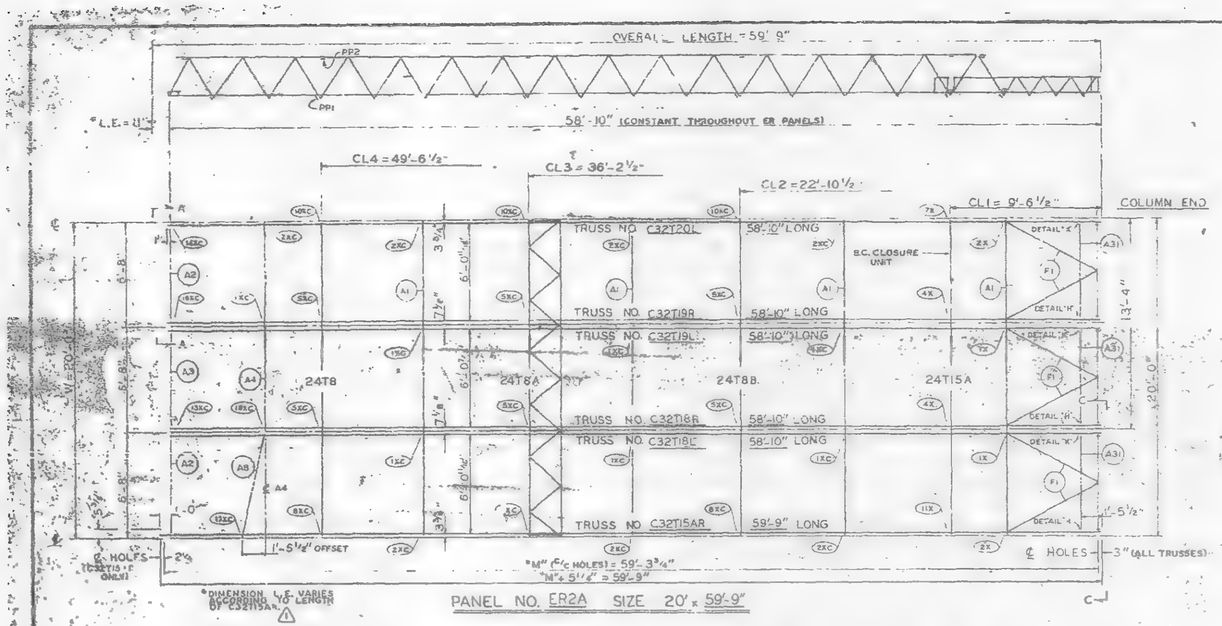
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

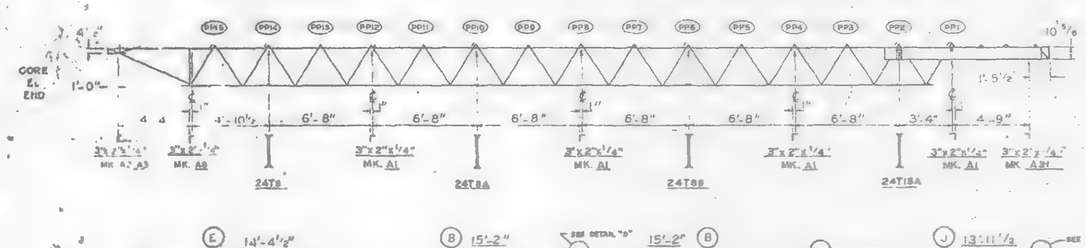
NO.	DATE	REVISION	BY
1	6-19-69	AS NOTED	GDC

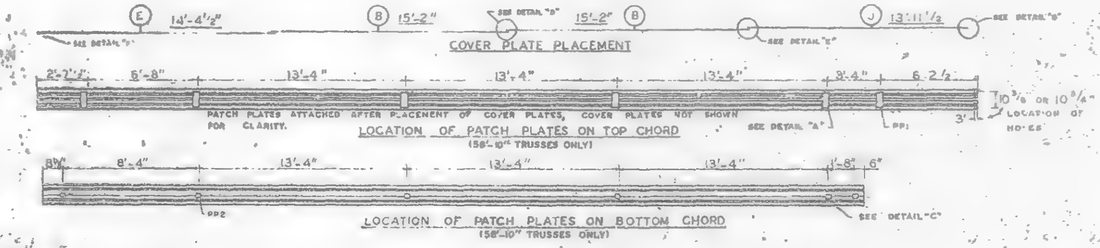
REF. DRWGS [illegible]

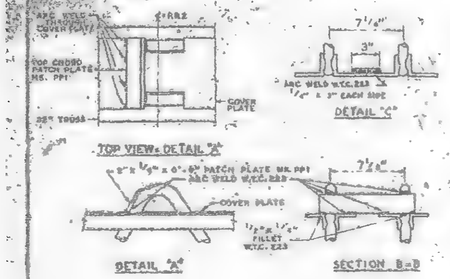
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N.Y.C.
FOR
PORT OF NEW YORK AUTHORITY
BLDG. A FLOOR 72-73 (N) PANEL E 18'-3"
BLDG. B FLOORS 72-73 (WEST)
FABRICATION BY LATROBE STEEL COMPANY
FABRICATED MADISON, ILLINOIS
DESIGN DRAWING NO. C-A3312 10-15-68
APPROVED FOR FABRICATION BY [illegible] DATE 12/10
DRAWN BY [illegible] DATE NOV 4 1968
CHECKED BY [illegible] DATE NOV 5 1968
PASS DRAWN WORK NO. [illegible] SHEET NO. [illegible] OF [illegible] SHEETS

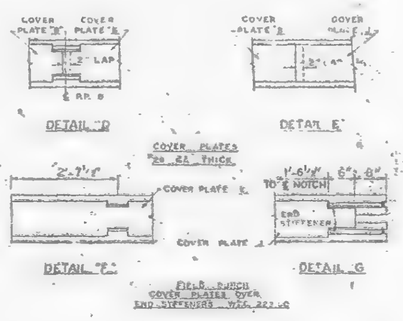

OVERALL LENGTH = 58'-10"
58'-10"
CL 1 - 49'-0"
CL 1 - 36'-2½"
TRUSS NO. C3212
TRUSS NO. C3213
TRUSS NO. C3213
TRUSS NO. C3213
57'-7" LONG
24T8
24T8A
24T8B
24T15
DUS-3
DUS-1
DUS-1
DUS-3
HC4=5'-9"
10'-0"
10'-0"
5'-0"
1'-5½"
"M" (C/C HOLES) = 57'-1⅜"
L = "M" + 5½" = 57'-7"
1'-6⅛" OFFSET
COLUMN ℄
℄ HOLES
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C3212 TRUSS.
PANEL NO. ERIP SIZE 20' x 57'-7"
CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.
SEE DETAIL "A"
SADDLE
4'-10½"
6'-8"
6'-6"
6'-6"
4'-6½"
MK. A2, A3
MK. A8
MK. A1
MK. A
MK. A1
MK. A1
MK. A2, A3
24T8
24T8A
24T8B
24T15
E 14'-4⅛"
B 15'-2"
SEE DETAIL "D"
B 15'-2"
SEE DETAIL "C"
A 14'-11⅛"
SEE DETAIL "D"
SEE DETAIL "B"
COVER PLATE PLACEMENT
2'-7½"
6'-8"
13'-4"
13'-4"
6'-2"
PATCH PLATES ATTACHED EITHER DIRECTLY OF COVER PLATE. COVER PLATES NOT SHOWN
SEE DETAIL "A"
3" OR 10"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON TOP CHORD 18'-10" TRUSSES ONLY
8½"
8'-4"
13'-4"
13'-4"
3'-4"
1'-0"
SEE DETAIL "A"
1½" OR 1'-0½"
LOCATION OF HOLES
LOCATION OF PATCH PLATES ON BOTTOM CHORD 18'-10" TRUSSES ONLY
EXT. COL. REF. LINE
8'-2½"
WELD LENGTH OF ½" WTC 22300
8"
WELD MK 6" AT 30°
TYP EACH FLAT
WTC 23000
TYPICAL PLAN OF TOP CHORD, COLUMN END DIAGONAL TRUSS BRACES PLACED WITH DECK BY WTC 22300
STUDS WTC 23000
F1
WTC 21400
4½"
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.
REQ'D MATERIAL
MK. | QTY. | EC. | SIZE | LENGTH | WEIGHT
TOP CHORD TRUSSES
T3 | 1 | 58' 10" | 2W 3
T4 | 1 | 58' 10" | 2W 4
T5 | 1 | 58' 10" | 2
T5A | 1 | 2 B
T6 | 1 | PT 208A
T7C | 1 | 15
3½" x 2½" x ¼" ANGLE
A2 | 4 | 4
A3 | 4 | 4
A4 | 1 | 3½" x 2½" x ¼" x 13'-3" | 5 403
A8 | 1 | 3½" x 2½" x ¼" x 6'-8" | ST 405
DIAGONAL FLATS
F1 | 6 | 1½" x 6" x 6'-8" | ST 402
COVER PLATES
P1 | 6 | 10" x .0635" x 18'-2" | ST 303
P2 | 8 | 9" x .0635" x 14'-6" | ST 303
ANGLE CLIPS
C1 | 20 | 8" x ½" x 1'-0" | ST 401
C2 | 4 | 12" x 1½" x 1'-4" x 6" | ST 401
DAMPING SADDLE
DS-3 | 2 | 3½" x 3½" x 3'-0" | ST 226
DS-3 | 1 | 3½" x 3½" x 10'-3" | ST 223
CONNECTION BAR
CB1 | 6 | ½" x 1'-3" | ST 400
CB2 | 8 | ½" x 1'-5" | ST 400
CONNECTION PLATES
P1 | 5 | 3½" x ½" x 6'-2" | ST 400
P2 | 1 | 6'-2" x 39" x 0'-9" | ST 400
P3 | 1 | 6'-2" x 39" x 1'-0" | ST 400
P5 | 3 | 6'-2" x 1¼" x 1'-6" | ST 400
P6 | 1 | 6'-2" x 39" x 0'-9" | ST 401
⅞ SHEAR ANCHOR
AZ | 6 | ⅞ DIA. x 6"-0" | ST 400
PATCH PLATES
PP1 | 18 | ½" x 1'-4" x 0'-9" | ST 400
PP2 | 18 | ½" x 6" x 0'-9" | ST 400
(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-7C SERIES OR SQUIBB.
(2) UNLESS OTHERWISE NOTED ALL CONNECTION ARC WELDS TO BE ⅛" x 1" FULL THROAT FILLET.
A = 1¼"
B = 1¼"
TOP VIEW - DETAIL "A"
COVER PLATE
ARC WELD WTC 22300
DETAIL "A"
2" x 2½" x 6'-0" PATCH PLATE PP1
ARC WELD WTC 22300
COVER PLATE
¼" x 1½" FILLET WTC 22300
SECTION B-B
ARC WELD WTC 22300
V1 OR V4
AZ OR A3
DETAIL "B"
TOP VIEW - DETAIL "B"
COVER PLATE 5
COVER PLATE 6
DETAIL "E"
COVER PLATE 8
DETAIL "F"
2'-7½"
COVER PLATES SEE DETAIL
COVER PLATE 5
DETAIL "E"
COVER PLATE 8
2'-2½" TO 6" NOTCH
END STIFFENER
DETAIL "G"
FLOOR PLATES COVER PLATES END STIFFENER WTC 23300
℄ TRUSS
½" x 2" FILLET WELD 22300
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT
MK. A2 3½" x 2½" x ¼" ANGLE
SEE DETAIL "J"
SECTION A-A
END SUPPORT ANGLE
ARC WELD WTC 22300
MK. PP2
ARC WELD WTC 22300 ½" x 3" EACH SIDE
DETAIL "C"
SECTION C-C
6-19-69 | AS NOTED | GDC
NO | DATE | REVISION | BY
AS DWGS
BLDG. B FLOORS 74 (N)
BLDG. B FLOORS 74 (WEST) ⚠
FABRICATED AT MADISON, ILLINOIS
APPROVED FOR SHOP WORK
APPROVED FOR FIELD WORK
DETAILED BY ARMCO STEEL CORP.
James W. Keefe 1/2/70
DATE
ERIP

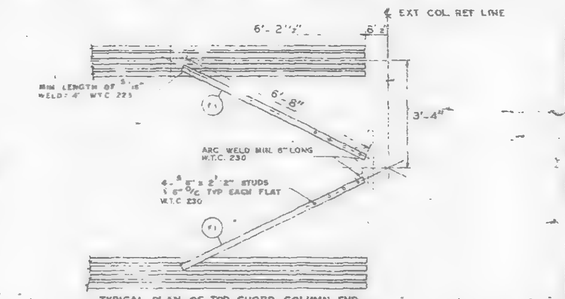


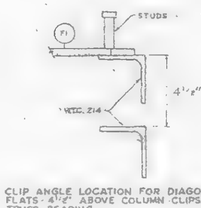






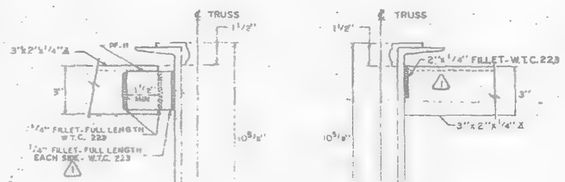


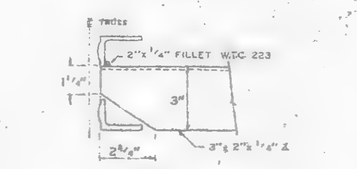


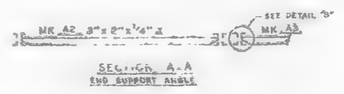


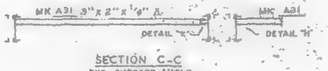
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG
FLOOR TRUSSES	T15AR	1	C32T15AR x 58'-9"	T 215AL
	T8	1	C24T8AR x 58'-10"	ST - 8L
	T20	1	C32T20L x 58'-10"	ST 320
BRIDGING TRUSSES	T8	1	24T8 x 19'-11"	ST 208
	T8A	1	24T8A x 19'-11"	ST 208A
	T8B	1	24T8B x 19'-11"	ST 208B
	T15A	1	24T15A x 9'-11"	ST 215A
3"x 2"x 1/4" ANGLE	A1	4	3"x2"x 1/4" x 9"	ST 403
	A2	2	3"x2"x 1/4" x 5'-6"	ST 403
	A3	1	3"x2"x 1/4" x 1'-8"	ST 403
	A4	1	3"x2"x 1/4" x 1'-3"	ST 403
	A8	1	3"x2"x 1/4" x 6'-8"	ST 403
	A31	3	3"x2"x 1/4" x 6'-4"	ST 403
CLOSURE PLATES	PP11	3	3"x 1/4" x 0'-2 3/4"	ST 412
DIAGONAL FLATS	F1	6	1'-2" x 6'-8" x 8'-8"	ST 402
PATCH PLATES	PP1	18	2"x1/4" x 0'-9"	ST 400
	PP2	18	3"x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9"x .0135" x 5'-2"	ST 303
	E	3	9"x .0135" x 14'-4 1/2"	ST 303
	J	3	9"x .0135" x 13'-11 1/2"	ST 804
B.C. CLOSURE UNIT	BCU	1	1'-4" D x 6'-8 1/2"	ST 215A
ANGLE CLIPS	C1	20	3"x1"x.25"x 6"	ST 400
	C2	4	2"x1"x.25"x 8"	ST 400
3/4" ø SHEAR ANCHOR	SA2	0	3/4" ø REBAR x 0'-0"	ST 400
CONNECTION BAR	CB1	2	1" D x 1'-3"	ST 400
	CB2	6	1" D x 3'-1"	ST 400
	CB3	6	1" D x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 1'-6" x 1/4"	ST 420
	P2	1	4'-8" x .36" x 1'-0"	ST 410
	P3	1	4'-8" x .30" x 1'-0"	ST 410
	P5	3	4'-8" x 1/4" x 8"	ST 410
	P6	1	4'-8" x .39" x 0'-8"	ST 461
	P9	0	3" x 1'-8" x 1/4"	ST 410

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (J)
ALL CONNECTION DETAILS FOR FLOORS 23, 50 & 52 ARE SHOWN ON SHEETS CD 213 THRU CD 229
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4"x1/8" FULL "THROAT FILLET"









NO.	DATE	REVISION	BY
2	7-1-68	AS NOTED	G
1	2-4-68	AS NOTED	G

REE DRWG.

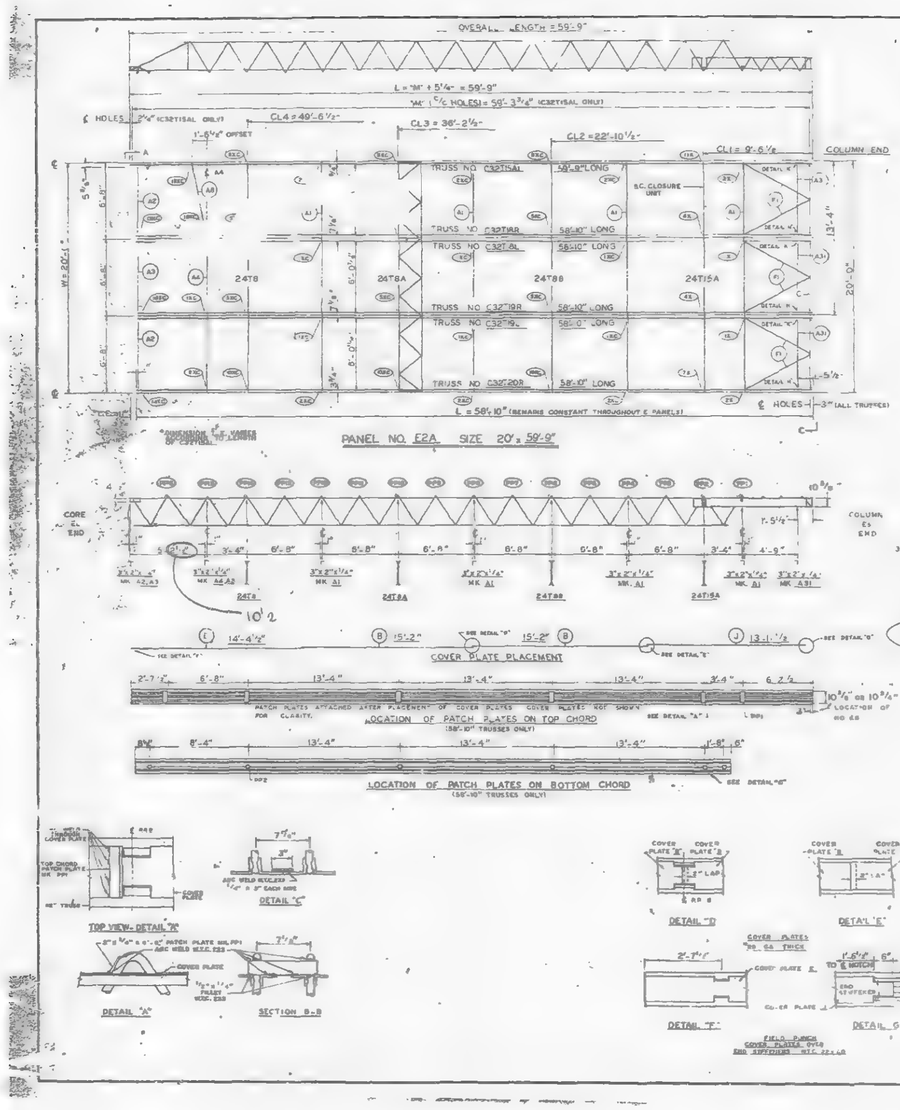
7-A83-23	10-4-68
" A83-24	8-15-68
7-A81-14,17,18&19	10-4-68
7-A82-3	7-27-68
7-A82-14	10-4-68
SA-124	10-11-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)
PANEL SIZE 20' x 59'-9
BLDG. B FLOORS 25 (EAST & WEST) 59 (WEST) (A)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-A83	SHEET NO
APPROVED FOR FABRICATION (MODIFIED) BY LA SALLE & HEDRICK FOR PORT A	DATE	DRAWN BY [illegible] DATE DEC. 5, 1968	
APPROVED FOR FABRICATION BY ENG. FABRICATOR	DATE	CHECKED BY [illegible] DATE DEC. 5, 1968	NO. & INITIALS OF DESIGN ENGRS.
DETAILED BY LACLEDE STEEL CO.		FABRICATION CONT NO W.T.C. 221	SHEET NO FD 10 A



REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DWG
FLOOR TRUSSES	T15AL		C32T 5AL + 58'-10"	S" 215AL
	T15L		2 1/2 x 2 1/2 x 1/4 x 58'-10"	ST 2 BL
	T20R		2 1/2 x 2 1/2 x 1/4 x 58'-10"	S" 216L
	T20AR	1	C32T20R + 58'-10"	S" 220L
BRIDGING TRUSSES	TB		24TB x 19'-1"	BT 208
	TBA	1	24TBA x 19'-1"	BT 208A
	TBB	1	24TBB x 19'-1"	BT 208B
	T15A	1	24T 15A x 19'-1"	BT 215A
3" x 2" x 1/4" ANGLE	A	4	3"x2"x 4"x 8'-1"	ST 403
	A2	2	3" x 2" x 1'-4" x 8'-1"	ST 403
	A3		3" x 2" x 1'-4" x 8'-1"	ST 403
	AA		3" x 2" x 1'-4" x 13'-3"	ST 403
	AB	1	3" x 2" x 1'-4" x 5'-8"	ST 403
	A31	3	3" x 2" x 1'-4" x 20'-8"	ST 403
CLOSURE PLATES	PP	3	3" x 1" x 1'-2"	ST 412
DIAGONAL FLATS	F	8	1'-8" x 8'-8" x 8'-8"	ST 407
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	18	3" x 1'-4" x 0'-3"	ST 400
COVER PLATES	B	8	9" x 0.135" x 15'-2"	S" 303
	E	3	9" x 0.135" x 14'-4 1/2"	ST 303
	J	3	9" x 0.135" x 13'-1 1/2"	S" 304
B.C. CLOSURE UNIT	BC	1	1'-4" x 5'-8" x 8"	ST 2.5A
ANGLE CLIPS	C1	20	2" x 2" x 0'-2 1/2" x 6"	ST 400
	C2	4	2" x 1 1/4" x 0'-2 1/2" x 6"	ST 400
7/8" SHEAR ANCHOR	SA2	0	7/8" REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	(5)	1" x 6" x 1'-3"	ST 400
	CB2	8	1" x 6" x 0'-1'-3"	ST 400
	CB3	6	1" x 6" x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3'-0" x 1'-1" x 8'-1" x 8"	ST 403
	P2	1	1'-0" x 1'-4" x .38" x 1'-0"	ST 400
	P3	1	1'-0" x 1'-4" x .38" x 1'-0"	ST 400
	P5	3	4 1/2" x 1'-4" x 1'-8"	ST 400
	P6	1	4'-6" x 1'-4" x .38" x 0'-8"	ST 401
	P8	8	3" x 1'-1" x 1'-2"	ST 408

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS OF THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (A)
ALL CONNECTION DETAILS FOR FLOORS 25, 50 & 82 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

REF DRWG.

7-A83-32	10-4-68
7-A83-34	9-16-68
7-A82-17, 18 & 19	10-4-68
7-A82-3	7-22-68
7-A82-14	10-4-68
SA-124	10-11-68

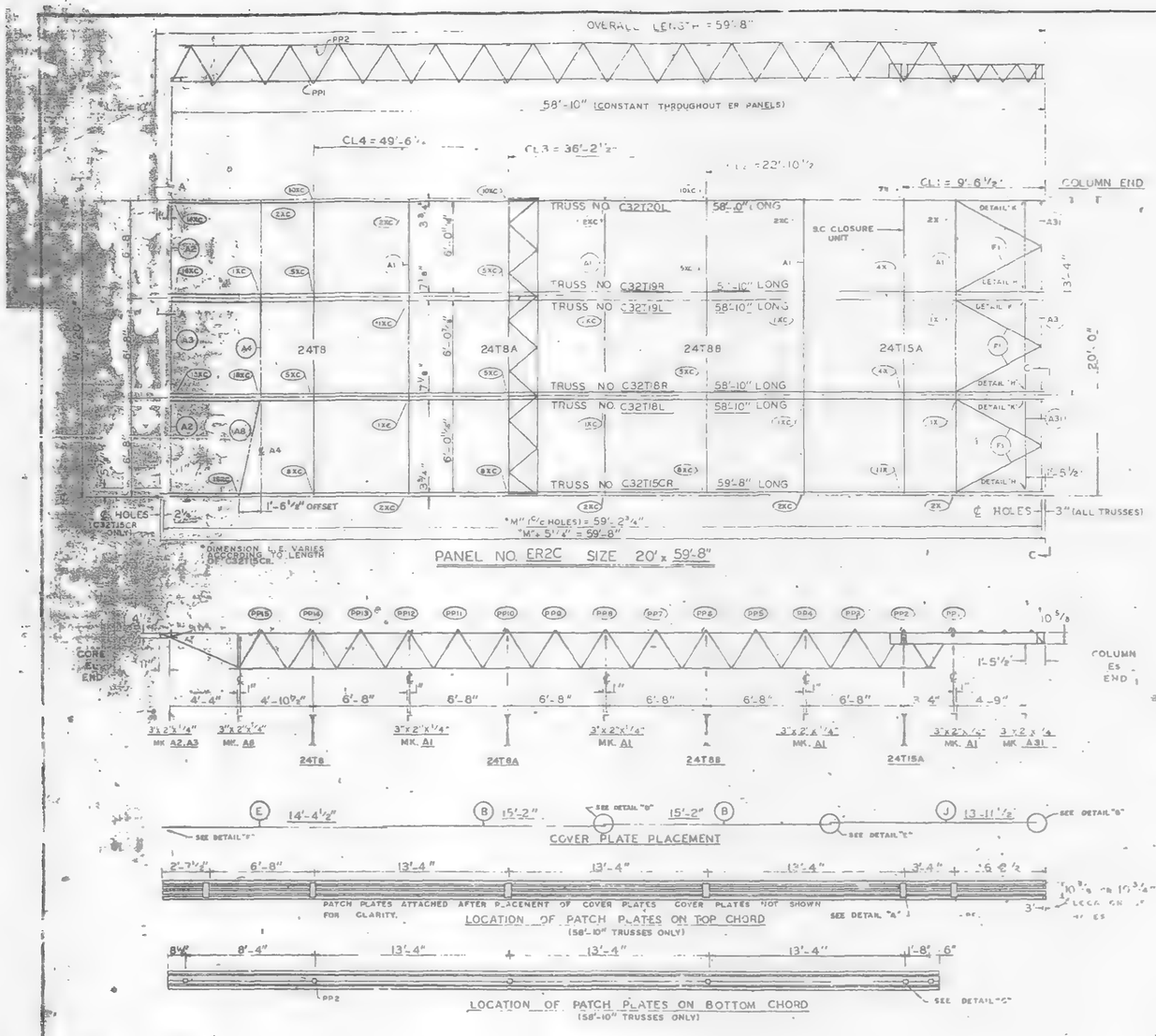
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N Y C
FOR
THE PORT OF NEW YORK AUTHORITY

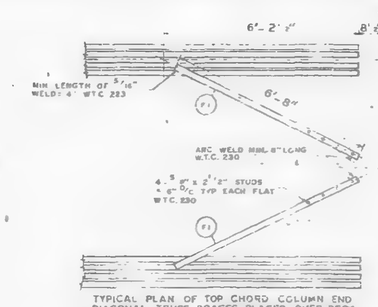
BLDG. A FLOORS 25 (NORTH & SOUTH) 59 (NORTH)

PANEL F2A - 20' x 59'-9"

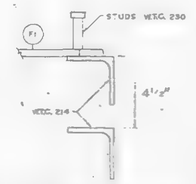
FABRICATED AT	MANUFACTURING PLANT NO. 5	DESIGN DRAWING NO.	7-A83-32 PLATE
APPROVED FOR FABRICATION BY	FOR PORT A	DATE	DRAWN BY [illegible] DATE DEC 5, 1968
APPROVED FOR FABRICATION BY	FOR FABRICA	DATE	CHECKED BY TM SHIRA DATE DEC 5, 1968 IN CHARGE OF FROD. DEP.
DETAILED BY A.S. PERES			FABRICATION CONT. NO. WTC 221 SHEET NO. FP F2A

FABRICATION BY LACLEDE STEEL COMPANY





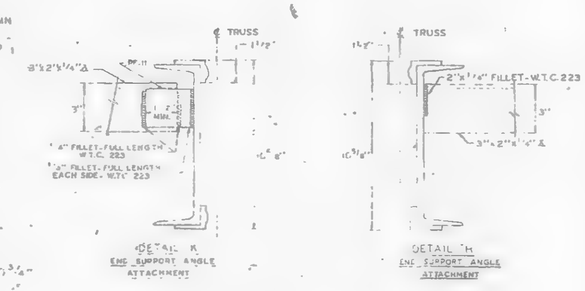
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



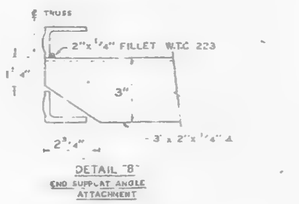
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK	NO'S	SIZE	
FLOOR TRUSSES	T15CR	1	C32T15CR x 59'-8"	ST 215CL
	T18L	1	C32T18L x 58'-10"	ST 218L
	T19L	1	C32T19L x 58'-10"	ST 219L
	T20L	1	C32T20L x 58'-0"	ST 220L
BRIDGING TRUSSES	T8	1	24T8 x 19'-11"	BT 208
	T8A	1	24T8A x 18'-11"	BT 208A
	T8B	1	24T8B x 18'-11"	BT 208B
	T15A	1	24T15A x 19'-11"	BT 215A
3"x 2"x 1/4" ANGLE	A1	4	3"x2"x 4'-8"	ST 403
	A2	1	3"x2"x 4'-8"	ST 403
	A3	1	3"x2"x 4'-8"	ST 403
	A4	1	3"x2"x 4'-8"	ST 403
	A8	1	3"x 2"x 4'-8"	ST 405
	A31	3	3"x 2"x 4'-8"	ST 410
CLOSURE PLATES	PP1	1	3"x 1'-4" x 1'-5"	ST 410
DIAGONAL FLATS	F1	6	1'-3" x 5'-6" x 6'-6"	ST 402
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	18	3" x 3'-8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 14'-6 1/2"	ST 303
	J	3	9" x .0135" x 13'-11 1/2"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1'-4" O x 6'-6"	BT 215A
ANGLE CLIPS	C1	20	2 1/2" x 1'-2" x .25" x 8"	ST 400
	C2	6	2 1/2" x 1'-2" x .25" x 6"	ST 400
3/4" ø SHEAR ANCHOR	SA2	0	3/4" ø REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
	CB2	6	1 3/16" ø x 1'-3"	ST 400
	CB3	6	1 3/16" ø x 1'-6"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 8" x 6"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-6"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

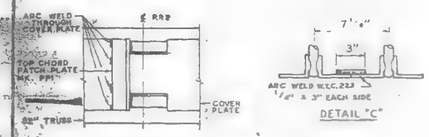
ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E 70 SERIES OR EQUAL
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS (W.T.C.)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1/4" FULL THROAT FILLET

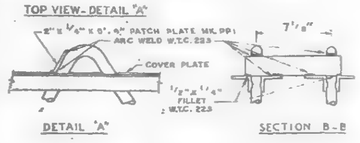


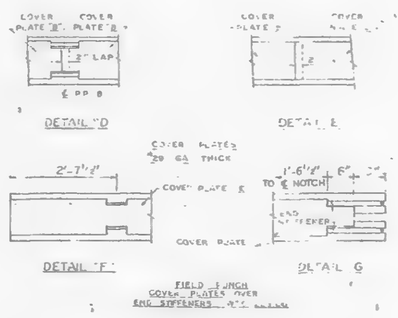
SECTION C-C
END SUPPORT ANGLE



DETAIL "B"
END SUPPORT ANGLE ATTACHMENT







NO	DATE	REVISION	BY

REF. DRWG.

7-AB3-33	10-4-68
7-AB3-24	8-15-68
7-AB1-14, 17, 18 & 19	10-4-68
7-AB2-3	7-22-68
7-AB2-14	10-4-68
SA-124	10-11-68

[illegible] PANEL DETAILS
FOR
[illegible] GRADE DEVICE N.Y.C.
FOR
THE [illegible] OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

PANEL ER2C - 20' x 59'-8"

BLDG. B FLOORS 59 & 92 (EAST)

FABRICATION BY [illegible] STEEL COMPANY

FABRICATED AT MADISON [illegible] NO. 5

DESIGN DRAWING NO 7-AB3-33 PLATE

APPROVED FOR FABRICATION BY [illegible] DATE 6/6/69

APPROVED FOR FABRICATOR BY [illegible] FOR FABRICATOR DATE

DRAWN BY [illegible] DATE APRIL 28, 1966

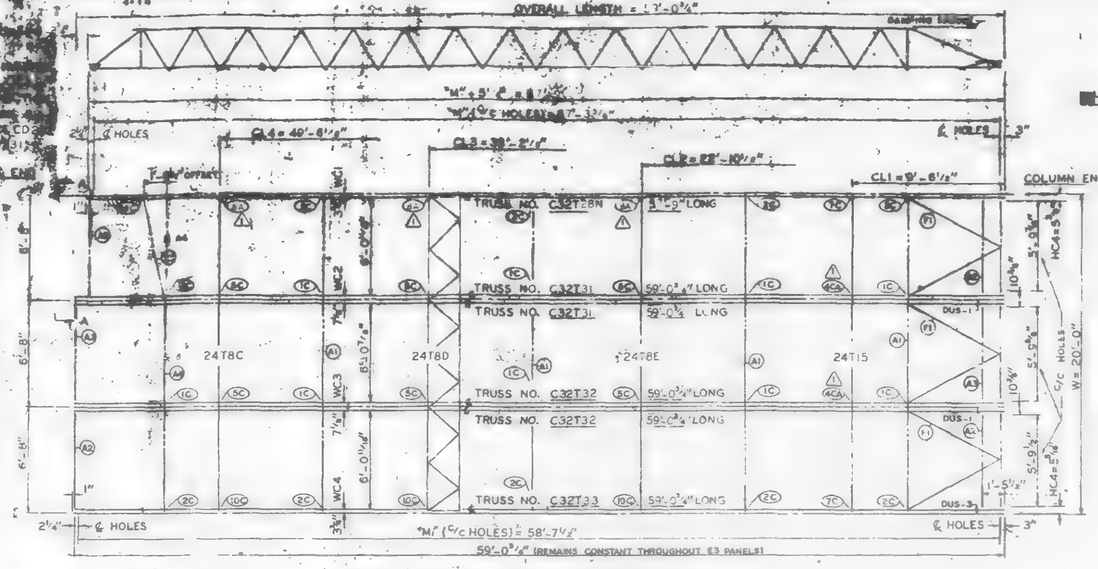
CHECKED BY T.M. CHURA DATE APRIL 28, 1966

IN CHARGE OF PROJECT

FABRICATION CONT. NO W.T.C. 221

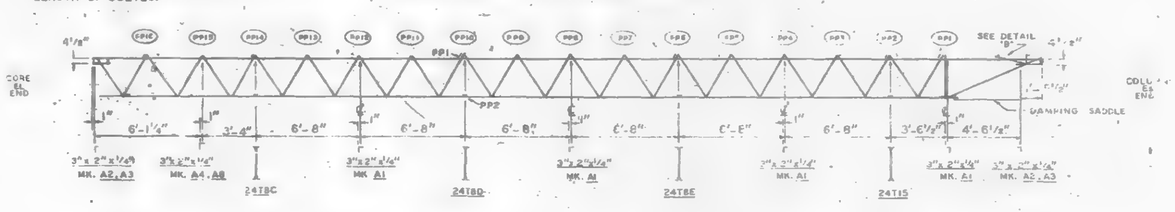
SHEET NO FP ER2C

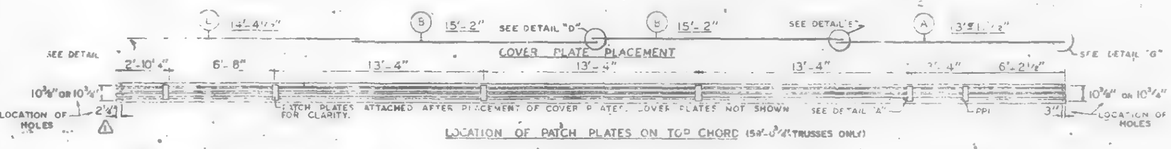
DETAILED BY A.C. WEBER



PANEL NO. E3N SIZE 20' x 59'-0¾"

*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

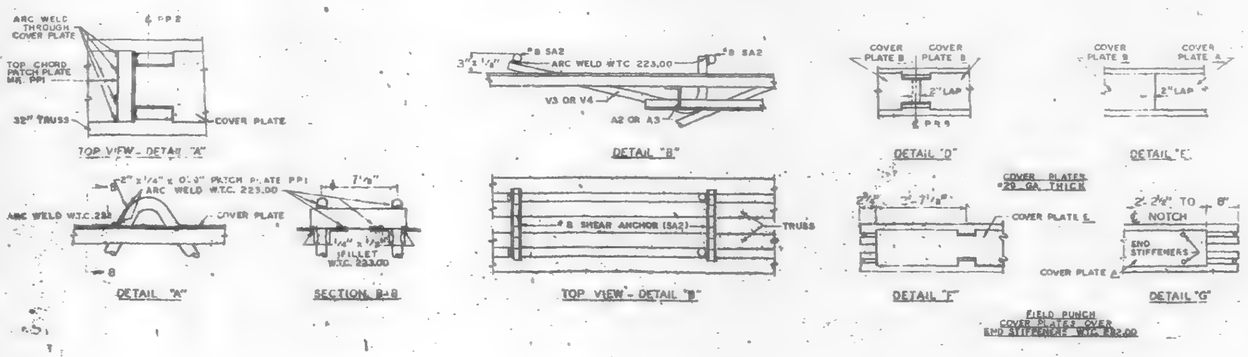


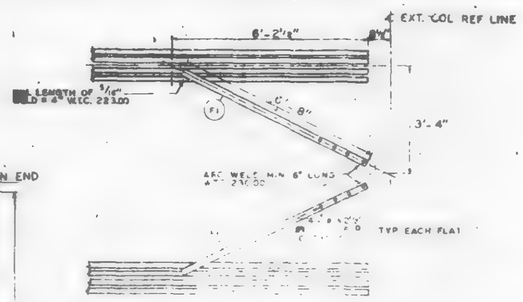


COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)

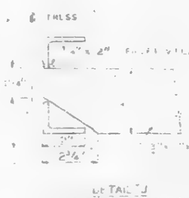


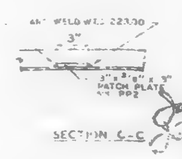


REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T28N	1	C32T28N - 3'-9"	ST 228N
	T31	2	C32T31 - 59'-0¾"	ST 231
	T32	2	C32T32 - 59'-0¾"	ST 232
	T33	1	C32T33 - 59'-0¾"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 18'-11"	ST 208C
	T8D	1	24T8D - 18'-11"	ST 208D
	T8E	1	24T8E - 18'-11"	ST 208E
	T15	1	24T15 - 18'-11"	ST 215
3½" x 2" x ¼" ANGLE	A1	4	3" x 2" x ¼" x 19'-11"	ST 403
	A2	4	3" x 2" x ¼" x 5'-11"	ST 403
	A3	2	3" x 2" x ¼" x 5'-11"	ST 403
	A4	1	3½" x 2" x ¼" x 3'-3"	ST 403
	A8	1	3½" x 2" x ¼" x 6'-3"	ST 405
DIAGONAL FLATS	L	1	1" x 5⅛" x 4'-4"	ST 402
GUSSET PLATES	A	3	8" x .0135" x 13'-10"	ST 303
	B	6	8" x .0135" x 15'-2"	ST 303
	E	1	8" x .0135" x 4'-2⅛"	ST 303
ANGLE CLIP	C1	2	2" x 1½" x ¼" x 0'-8"	ST 400
	C2	4	2½" x 1½" x ¼" x 6"	ST 400
CAMPION SADDLE	D	2	3½" x 1½" x 3'-8¼"	ST 298
	E	2	3½" x 1½" x 6'-8"	ST 298
CONNECTION BAR	B1	1	1" x 3" x 1'-5"	ST 400
	B2	1	½" x 3" x 1'-5"	ST 400
	B3	2	½" x 3" x 2'-0"	ST 400
CONNECTION PLATES	P1	1	3" x 8" x 2'-0"	ST 400
	P2	1	½" x 4" x 1'-8"	ST 400
	P3	1	½" x 3" x 1'-6"	ST 400
	P4	1	½" x 3" x 1'-6"	ST 400
	P5	3	½" x 3" x 1'-6"	ST 400
	P6	1	½" x 3" x 1'-6"	ST 401
8 SHEAR ANCHOR SA2			3" x ¼" x 8"	T 410
PATCH PLATES	PP1	16	2" x ¼" x 0'-3"	ST 400
	PP2	18	3" x ¼" x 1'-0"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. 40XX RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 4" FULL THROAT FILLET.





NO.	DATE	REVISION	DDC BY
4	4-24-69	AS NOTED	

ST-B-10	7-22-68	
ST-B-49	1-6-69	
ST-B-3	10-15-68	
ST-B-15 & 16	7-22-68	
ST-AB4-42	10-15-68	
ST-B-124	1-6-69	
ST-B1-25 & 28	1-6-69	
ST-AB1-29 & 30	1-6-69	
7-AB2-19	1-6-69	

N.Y.C. AUTHORITY

BLDG. A FLOORS 44 (NORTH ONLY)

PANEL E3N - 20' x 59'-0¾"

BLDG. B FLOORS 44 (WEST & EAST) (4)

FABRICATED BY [illegible] COMPANY

FABRICATED AT MADISON, ILL. NOIS

APPROVED FOR FABRICATION BY [illegible] FOR DAVIS

APPROVED FOR FABRICATION DATE 6/2/69

FOR FABRICATOR

DETAILED BY [illegible]

DESIGN DRAWING NO. AB3.49

DRAWN BY DDC

DATE APRIL 2, 1969

CHECKED BY T.M. CHURA

DATE APRIL 2, 1969

FABRICATION CONT. NO. WTC - 221

PLATE

IN CHARGE OF PROD. DEPT. [illegible]

PANEL NO. E3N

PANEL NO. ER2B SIZE 20' x 59'-8½"

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD
(58'-10" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD
(58'-10" TRUSSES ONLY)

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

DETAIL K
END SUPPORT ANGLE ATTACHMENT

DETAIL B
END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE

DETAIL B
END SUPPORT ANGLE ATTACHMENT

SECTION A-A
END SUPPORT ANGLE

DETAIL D

DETAIL E

DETAIL F

DETAIL G

DETAIL A

SECTION B-B

REQUIRED MATERIAL PER PANEL

MATERIAL	MK.	PCS	SIZE	REF. SPEC.
FLOOR TRUSSES	T58A	1	24T58A x 58'-8½"	ST 302
	T58	1	24T58 x 58'-10"	ST 301
	T58B	1	24T58B x 58'-10"	ST 303
	T59	1	24T59 x 59'-8½"	ST 304
	T20L	1	24T20L x 20'-6"	ST 305
BRIDGING TRUSSES	TB	1	8BT8 x 8'-11"	ST 306
	TBA	1	8BT8A x 8'-11"	ST 307
	TBB	1	8BT8B x 8'-11"	ST 308
	T15A	1	24T15A x 15'-11"	ST 309
3½" x 2½" x ½" ANGLE	A1	4	3½"x2½"x½"x 10'-11"	ST 405
	A2	2	3½"x2½"x½"x5'-11½"	ST 406
	A3	1	3½"x2½"x½"x9'-11½"	ST 407
	A4	1	3½"x2½"x½"x13'-3"	ST 408
	A8	1	3½"x2½"x½"x 8'-8"	ST 409
	A31	3	3½"x2½"x½"x5'-8½"	ST 410
CLOSURE PLATES	PP-11	3	3" x ½" x 0'-8½"	ST 412
DIAGONAL FLATS	F1	6	1½" x 8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x ½" x 0'-8"	ST 400
	PP2	18	3" x ½" x 0'-3"	ST 401
COVER PLATES	B	6	8" x .0135" x 15'-2"	ST 303
	C	8	6" x .0135" x 14'-4½"	ST 302
	J	3	9" x .0135" x 13'-4½"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1½" Ω x 6'-6½"	ST 215A
ANGLE CLIPS	C1	20	2½"x1½"x.25"x 8"	ST 400
	C2	4	2½"x1½"x.25"x 6"	ST 400
⅞" ø SHEAR ANCHOR	SA2	0	⅞" ø REBAR x 8'-0"	ST 400
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
	CB2	6	1" ø x 1'-5"	ST 400
	CB3	8	1⅜" ø x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3½"x 3½" x 8½"	ST 400
	P2	1	4½"x .39"x 0'-9"	ST 400
	P3	1	4½"x .39"x 1'-0"	ST 400
	P5	3	4½"x1½"x 1'-8"	ST 400
	P8	1	4½"x .39"x 0'-5"	ST 401
	P9	8	3"x 1½"x 1'-2"	ST 403

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (IX).
ALL CONNECTION DETAILS FOR FLOORS 49, 50 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 265.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 5/16" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

SKILLING · HELLE CHRISTIANSEN · ROBERTSON
Structural & Civil Engineers
APPROVED
APPROVED AS NOTED
RESUBMIT
REJECTED
Date 6/6/69 By SK

REF. DRWG.

7-A31-33	[illegible]
7-A23-24	[illegible]
7-A21-14, 17, 18 & 19	[illegible]
7-A32-31	[illegible]
7-A32-14	[illegible]
SA-124	[illegible]

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)

PANEL [illegible] PCS. 592

BLDG. A FLOORS 92 (SOUTH) [illegible]

FABRICATION BY LACLEDE STEEL COMPANY

FORWARDED AT MADISON, ILLINOIS

DESIGN DRAWINGS 7-A23-24

APPROVED FOR FABRICATION DATE

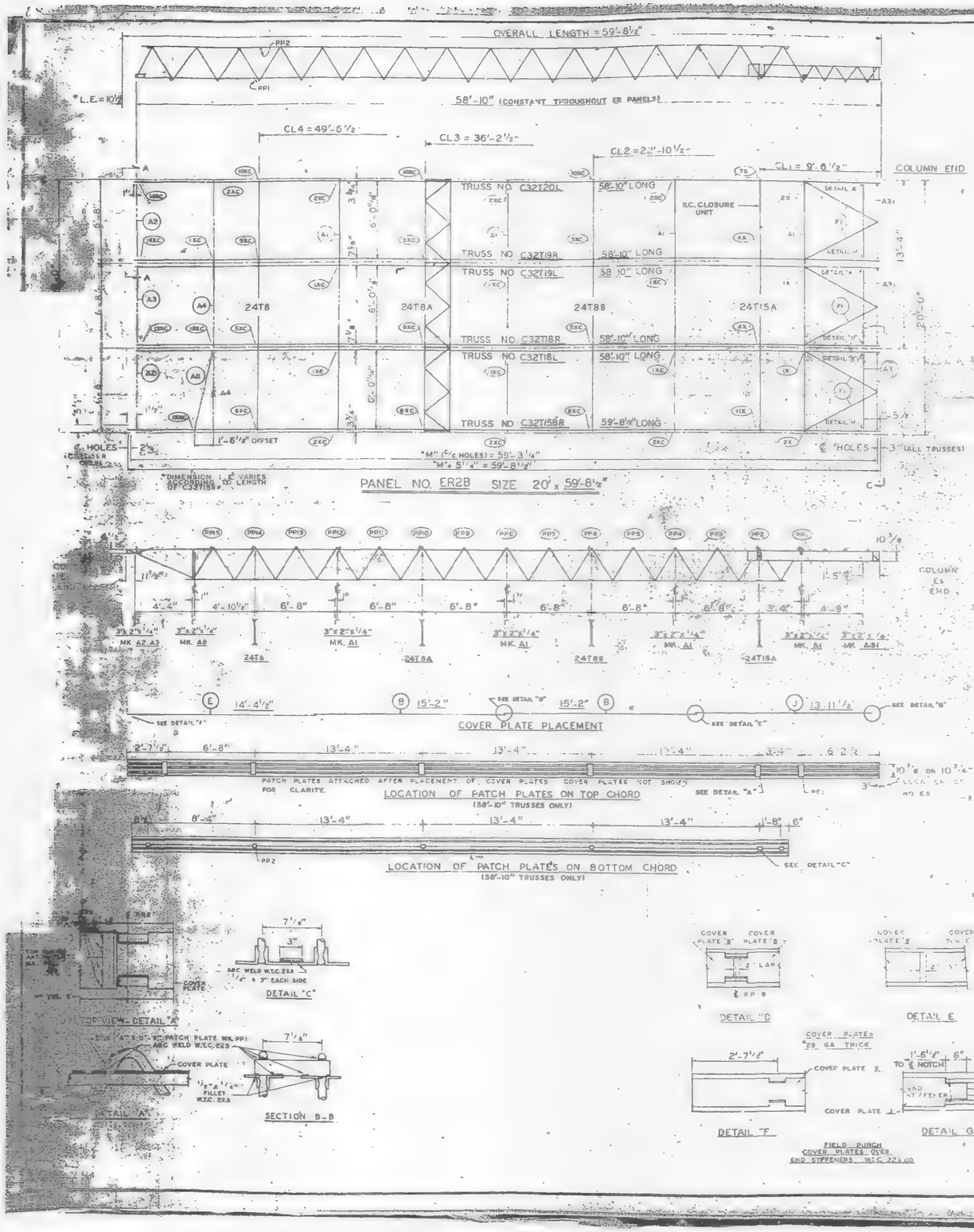
DRAWN BY [illegible] DATE APRIL 28, 1969

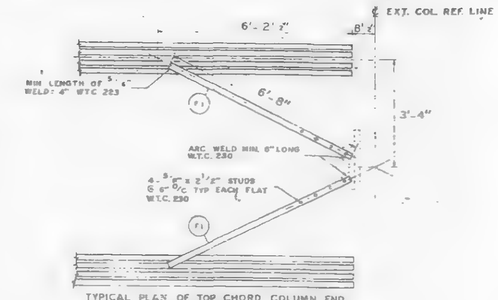
SUBMITTED FOR APPROVAL DATE

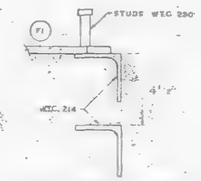
APPROVED BY [illegible]

CHECKED BY [illegible]

W.O. [illegible]

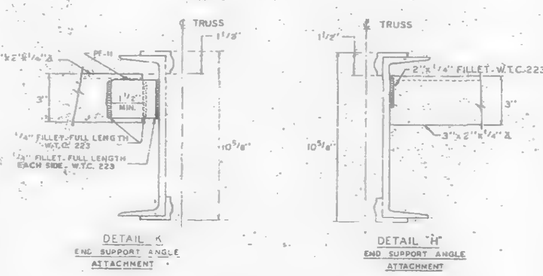


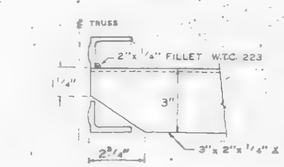


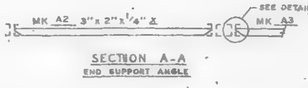


REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T15BR	1	C32T15BR x 59'-6½"	ST 215BL
	T18L	1	C32T18L x 58'-10"	ST 218L
	T18R	1	C32T18R x 58'-10"	ST 218L
	T19L	1	C32T19L x 58'-10"	ST 219L
	T19R	1	C32T19R x 58'-10"	ST 219L
	T20L	1	C32T20L x 58'-10"	ST 220L
BRIDGING TRUSSES	T8	1	24T8 x 19'-11"	ST 208
	T8A	1	24T8A x 19'-11"	ST 208A
	T8B	1	24T8B x 19'-11"	ST 208B
	T15A	1	24T15A x 19'-11"	ST 215A
3"x 2"x¼" ANGLE	A1	4	3"x2"x¼"x 19'-11"	ST 403
	A2	2	3"x2"x¼"x5'-11⅞"	ST 403
	A3	1	3"x2"x¼"x5'-11¾"	ST 403
	A4	1	3"x2"x¼"x13'-3"	ST 403
	A8	1	3"x2"x¼"x6'-8⅞"	ST 405
	A31	3	3"x2"x¼"x5'-8⅛"	ST 410
CLOSURE PLATES	PF11	3	3"x¼"x 0'-2⅜"	ST 4-2
DIAGONAL FLATS	F1	8	1½"x⅜"x 6'-8"	ST 402
PATCH PLATES	PP1	18	2"x¼"x 0'-9"	ST 400
	PP2	18	3"x⅜"x 0'-3"	ST 400
COVER PLATES	B	6	9"x.0135" x 15'-2"	ST 303
	E	3	9"x.0135" x 14'-4½"	ST 303
	J	3	9"x.0135" x 13'-11½"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1¼" ▯ x 6'-6½"	ST 215A
ANGLE CLIPS	C1	20	2⅝"x1½"x.253"x 8"	ST 400
	C2	4	2½"x1½"x.25"x 6"	ST 400
ø8 SHEAR ANCHOR	SA2	0	ø8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	2	1" ø x 1'-3"	ST 400
	CB2	6	1¾" ø x 1'-3"	ST 400
	CB3	6	1⅝" ø x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3½"x⅜"x 6½"	ST 400
	P2	1	4½"x.39"x 0'-9"	ST 400
	P3	1	4½"x.39"x 1'-0"	ST 400
	P5	3	4½"x¼"x 1'-6"	ST 400
	P6	1	4½"x.39"x 0'-9"	ST 401
	P9	6	3"x½"x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e. (IX)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN, ALL CONNECTION ARC WELDS SHALL BE 1"x¼" FULL THROAT FILLET.







NO.	DATE	REVISION	BY
1	6-13-69	AS NOTED	GDC

REF DRWG.

7-AB3-33	10-4-68
7-AB3-24	8-15-68
7-AB1-14,17,18&19	10-4-68
7-AB2-3	7-22-68
7-AB2-14	10-4-68
SA-124	10-11-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

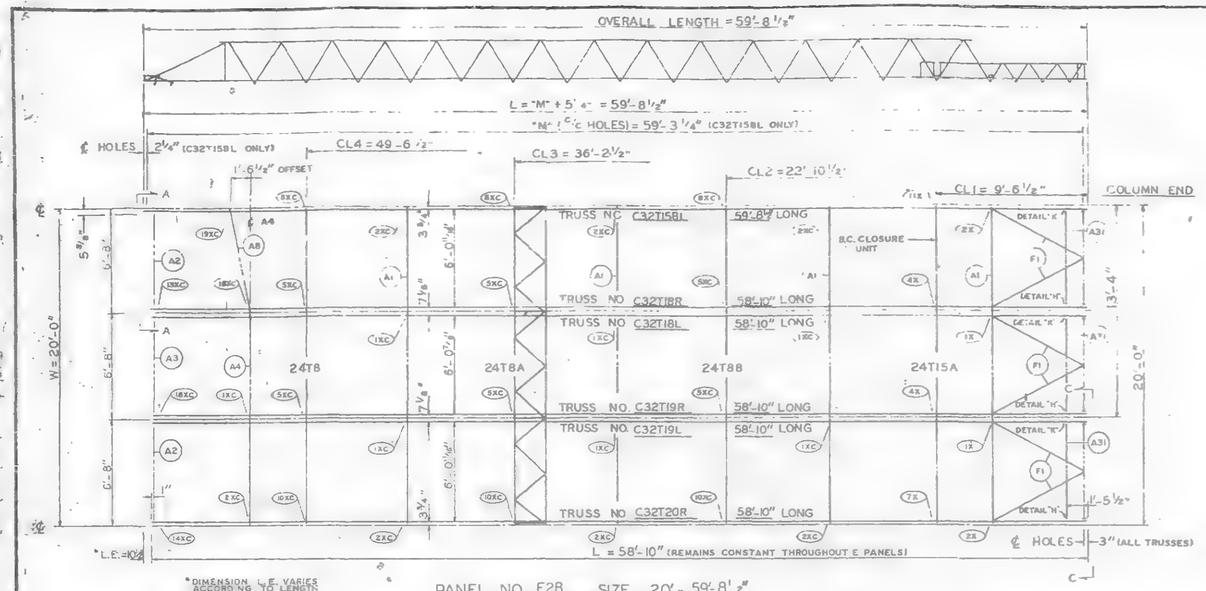
BLDG. A FLOORS 92 (NORTH)

PANEL ER2B - 20' x 59'-8½"

BLDG. B FLOORS 92 (WEST) ⚠

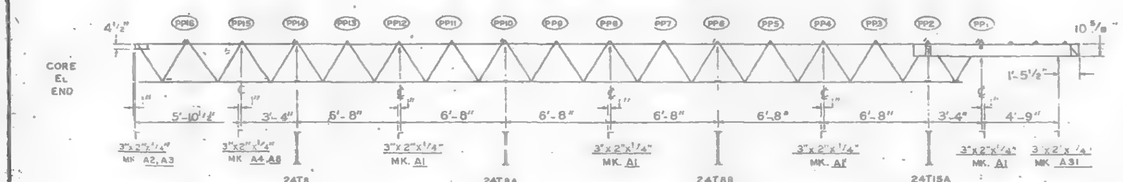
FABRICATION BY LACLEDE STEEL COMPANY

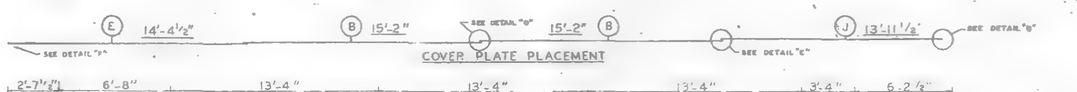
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-33,	PLATE
APPROVED FOR FABRICATION [illegible] FOR PONYA	DATE 7/28/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY [illegible]	DATE	CHECKED BY T.M. CHUBA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FP ER2B



* DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T15BL.

PANEL NO. E2B SIZE 20' x 59'-8 1/8"

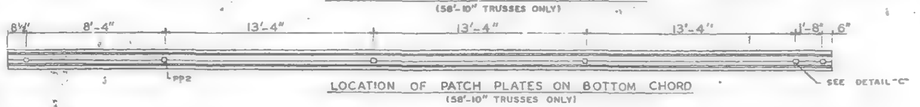




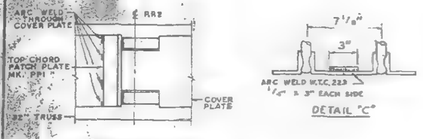
COVER PLATE PLACEMENT

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD
(58'-10" TRUSSES ONLY)



LOCATION OF PATCH PLATES ON BOTTOM CHORD
(58'-10" TRUSSES ONLY)

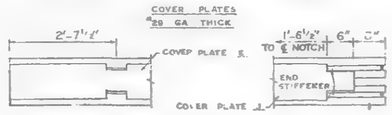


DETAIL "C"

TOP VIEW - DETAIL "A"

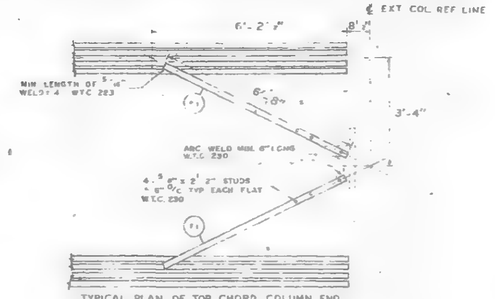
DETAIL "A" SECTION B-B

DETAIL "D" DETAIL "E"

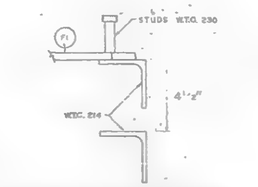


DETAIL "F" DETAIL "G"

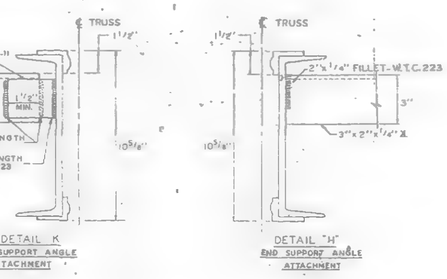
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.



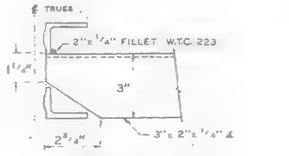
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.



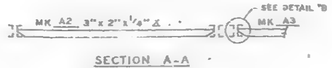
DETAIL K
END SUPPORT ANGLE ATTACHMENT

DETAIL "H"
END SUPPORT ANGLE ATTACHMENT

SECTION C-C
END SUPPORT ANGLE



DETAIL "B"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE

REQUIRED MATERIAL PER PANEL				
MATERIAL	MK.	PCS.	SIZE	REF. DRWG.
FLOOR TRUSSES	T15BL	1	C32T15BL x 59'-8 1/8"	ST 215BL
	T18BL	1	C32T18BL x 58'-10"	ST 218L
	T18BR	1	C32T18BR x 58'-10"	ST 218L
	T19BL	1	C32T19BL x 58'-10"	ST 219L
	T19BR	1	C32T19BR x 58'-10"	ST 219L
	T20R	1	C32T20R x 58'-10"	ST 220L
BRIDGING TRUSSES	T8	1	24T8 x 19'-11"	BT 208
	T8A	1	24T8A x 19'-11"	BT 208A
	T8B	1	24T8B x 19'-11"	BT 208B
	T15A	1	24T15A x 19'-11"	BT 215A
3"x 2"x 1/4" ANGLE	A1	4	3"x2"x1/4"x 10'-7"	ST 403
	A2	2	3"x 2"x 1/4"x5'-3 15/16"	ST 403
	A3	1	3"x 2"x 1/4"x 5'-1 3/4"	ST 403
	A4	1	3"x 2"x 1/4"x 1'-3"	ST 403
	A8	1	3"x 2"x 1/4"x 6'-8 7/8"	ST 405
	A31	3	3"x 2"x 1/4"x 5'-8 1/8"	ST 410
CLOSURE PLATES	PP.11	3	3" x 1'-4" x 0-2 3/8	ST 4.2
DIAGONAL FLATS	F1	6	1'-2" x 3'-8 1/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2'-7 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3'-8" x 0'-3"	ST 400
COVER PLATES	B	8	9'-x .0135" x 15'-2"	ST 303
	E	3	8'-x .0135" x 14'-4 1/2"	ST 303
	J	3	9'-x .0135" x 13'-11 1/2"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1'-1/4" D x 6'-6 1/2"	BT 215A
ANGLE CLIPS	C1	20	2"x 1'-2"x .25"x 6"	ST 400
	C2	4	2 1/2"x 1'-2"x .25"x 6"	ST 400
*8 SHEAR ANCHOR	SA2	0	*8 REBAR x 0'-9"	ST 400
CONNECTION BAR	C81	2	1" @ x'-3"	ST 400
	C82	6	1 3/8"-8 x 1'-3"	ST 400
	C83	6	1 3/8" @ x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3'-2" x 3'-7 1/2" x 6'-2"	ST 400
	P2	1	4'-2" x .39" x 0'-9"	ST 400
	P3	1	4'-2" x .39" x 1'-0"	ST 400
	P5	3	4'-2" x 1'-4" x 1'-8"	ST 400
	P6	1	4'-2" x .39" x 0'-9"	ST 400
	P9	6	3" x 1'-2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, ie. (JX)
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.

NO.	DATE	REVISION	BY

REF DRWG.

7-AB3-32	10-4-68
7-AB3-24	8-15-68
7-AB1-14, 17, 18 & 19	10-4-68
7-AB2-3	7-22-68
7-AB2-14	10-4-68
SA-124	10-11-68

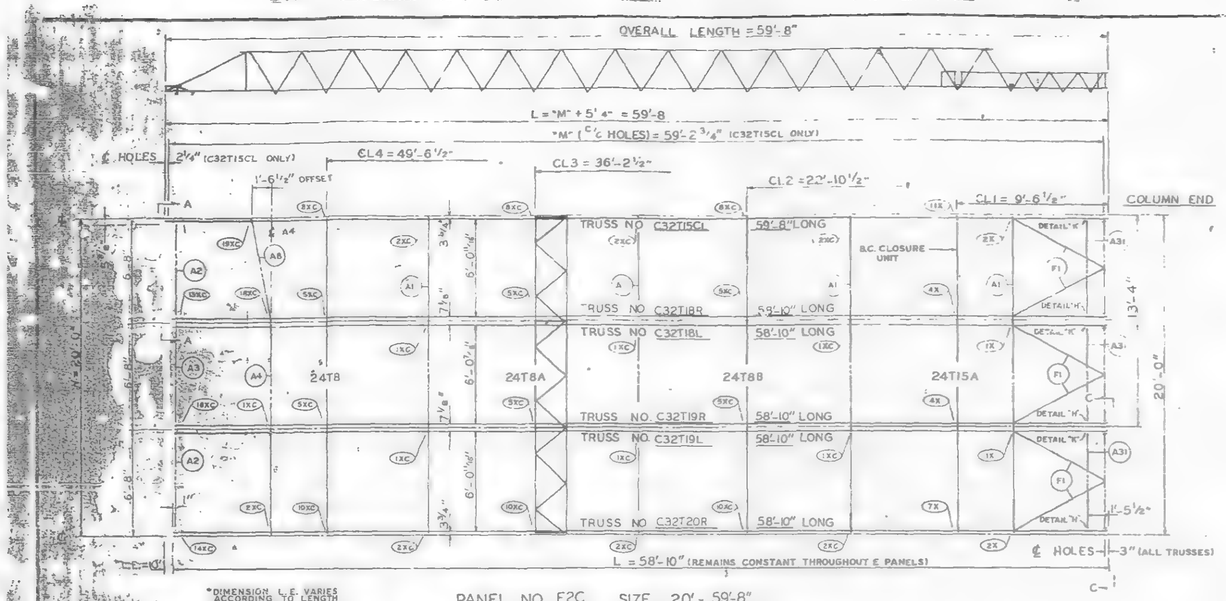
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 92 (NORTH)

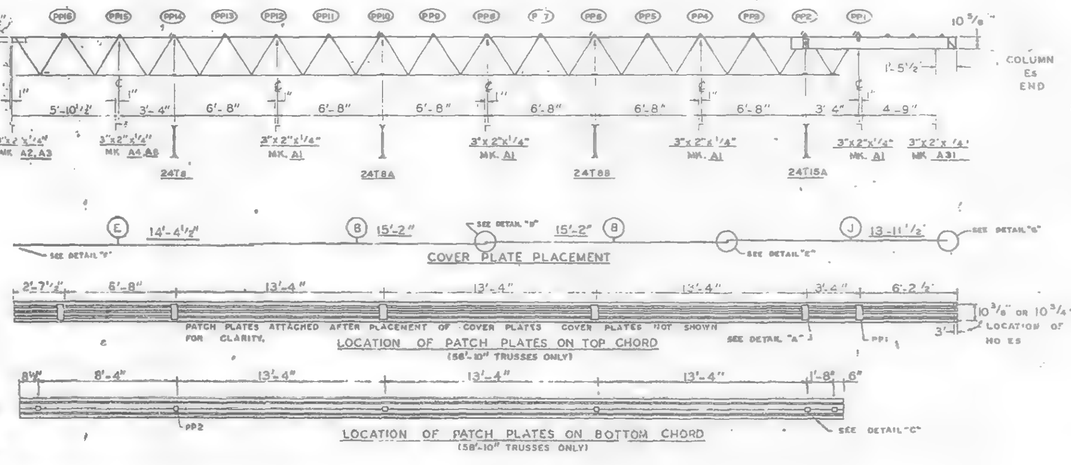
PANEL E2B - 20' x 59'-8 1/8"

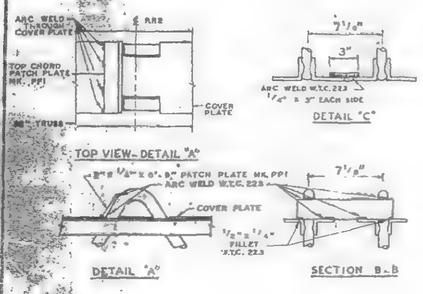
BLDG. B FLOORS 92 (WEST)

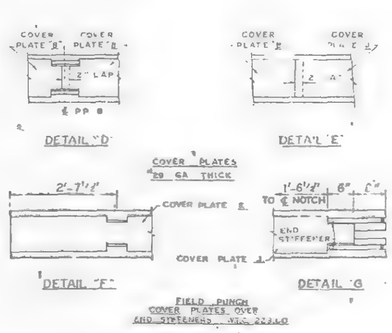
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-32	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 6/6/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT NO W.T.C. 221	SHEET NO FP E2B

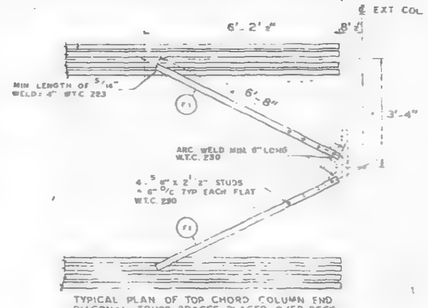


PANEL NO. E2C SIZE 20' x 59'-8"

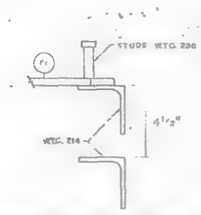








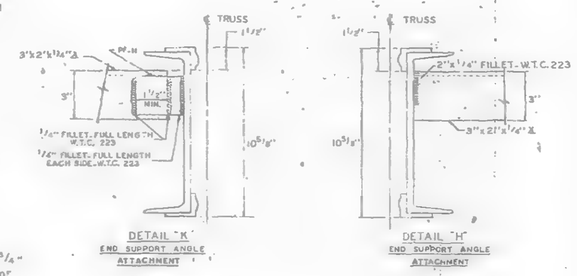
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.

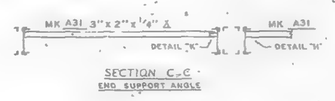


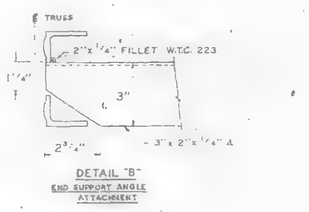
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T15C	1	C32T15C - 59'-8"	ST 215CL
	T18L	1	C32T18L - 58'-10"	ST 218L
	T19R	1	C32T19R - 58'-10"	ST 219L
	T20R	1	C32T20R - 58'-10"	ST 220L
BRIDGING TRUSSES	T8	1	24T8 x 19'-11"	ST 208
	T8A	1	24T8A x 19'-11"	ST 208A
	T8B	1	24T8B x 19'-11"	ST 208B
	T15A	1	24T15A x 19'-11"	ST 215A
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	2	3" x 2" x 1/4" x 19'-0 7/8"	ST 403
	A3	1	3" x 2" x 1/4" x 15'-11 3/4"	ST 403
	A4	1	3" x 2" x 1/4" x 13'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 8'-3 5/8"	ST 405
	A31	3	3" x 2" x 1/4" x 5'-8 1/8"	ST 410
CLOSURE PLATES	PP-1	3	3" x 1/4" x 0'-2 3/8"	ST 412
DIAGONAL FLATS	F1	6	1'-2" x 3 5/8" x 6'-8"	ST 402
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400
COVER PLATES	B	6	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 14'-4 1/2"	ST 303
	-	3	9" x .0135" x 13'-11 1/2"	ST 304
B.C. CLOSURE UNIT	B.C.	1	1'-4" O x 6'-6 1/2"	ST 215A
ANGLE CLIPS	C1	20	2" x 1 1/2" x .25" x 6"	ST 400
	C2	4	2 1/2" x 1 1/2" x .25" x 6"	ST 400
#8 SHEAR ANCHOR	SAZ	0	#8 REBAR x 0'-9"	ST 400
CONNECTION BAR	CB1	2	1" Ø x 1'-3"	ST 400
	CB2	6	1 3/4" Ø x 1'-5"	ST 400
	CB3	6	1 3/8" Ø x 1'-5"	ST 400
CONNECTION PLATES	P1	4	3 1/2" x 3" x 6 1/2"	ST 400
	P2	1	4 1/2" x .39" x 0'-9"	ST 400
	P3	1	4 1/2" x .39" x 1'-0"	ST 400
	P5	3	4 1/2" x 1/4" x 1'-8"	ST 400
	P6	1	4 1/2" x .39" x 0'-9"	ST 401
	P9	6	3" x 1/2" x 1'-2"	ST 409

ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
LETTERS AND NUMBERS IN ELLIPSES INDICATE CONNECTION DETAILS, i.e., (CD).
ALL CONNECTION DETAILS FOR FLOORS 25, 59 & 92 ARE SHOWN ON SHEETS CD 210 THRU CD 229.
UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS SHALL BE 1" x 1/4" FULL THROAT FILLET.







NO	DATE	REVISION	BY

REF DRWG.

7-AB3-32	10-4-68
7-AB3-24	8-15-68
7-AB1-14, 17, 18 & 19	10-4-68
7-AB2-3	7-22-68
7-AB2-18	10-4-68
SA-124	10-11-68

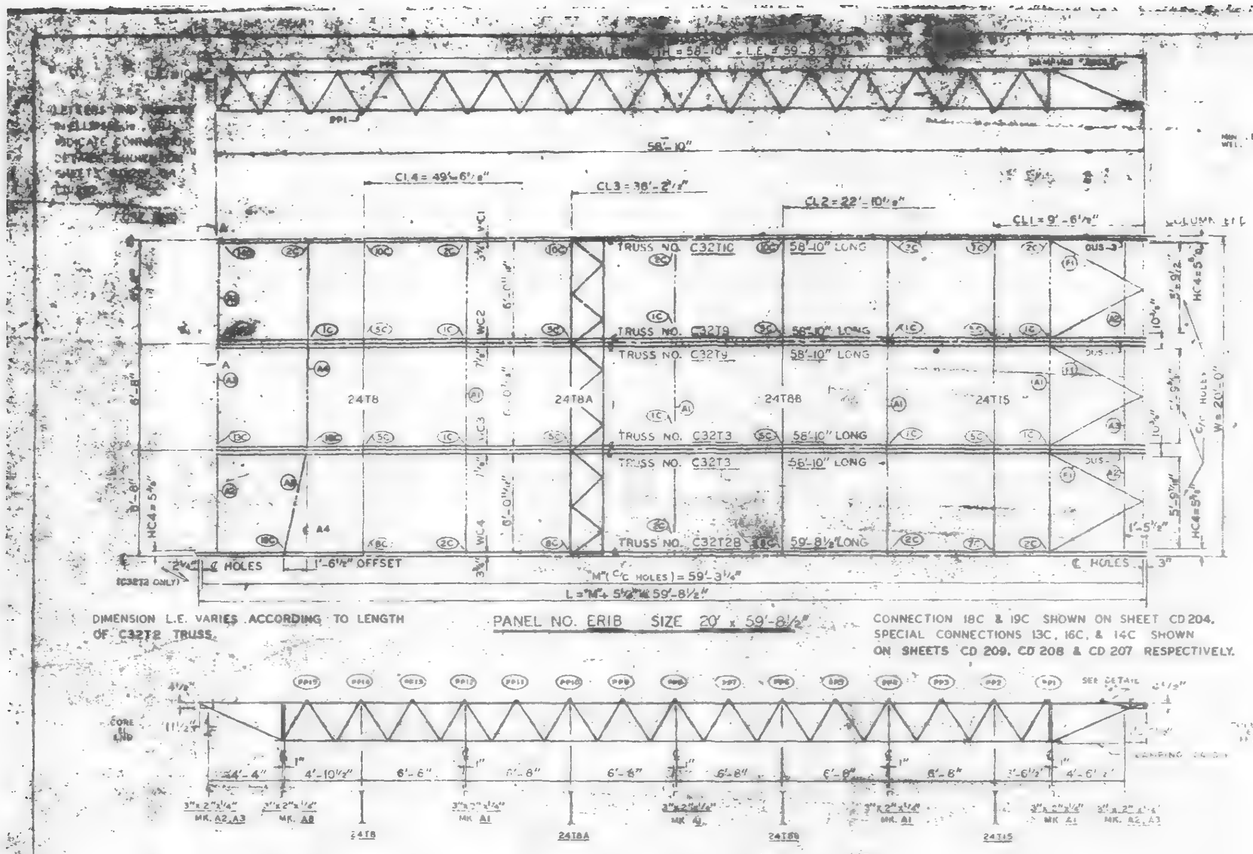
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 59 & 92 (SOUTH)

PANEL E2C - 20' x 59'-8"

BLDG. B FLOORS 59 & 92 (EAST)

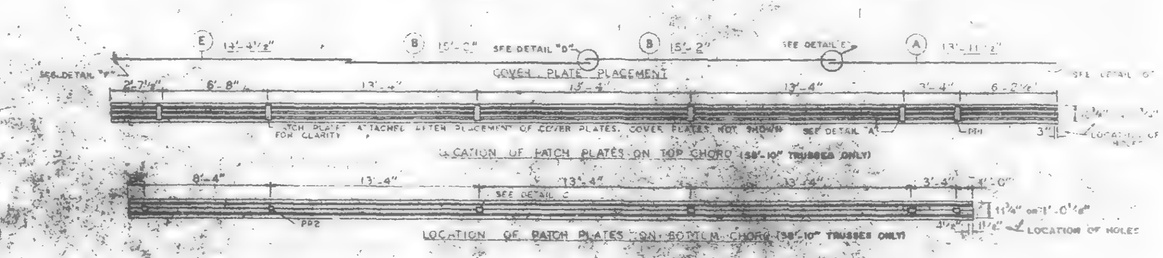
FABRICATION BY LACLEDE STEEL COMPANY			
FABRICATE AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-32	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONYA	DATE 6/6/69	DRAWN BY [illegible] DATE APRIL 28, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY TM CHURA DATE APRIL 28, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A.C. WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO FP E2C

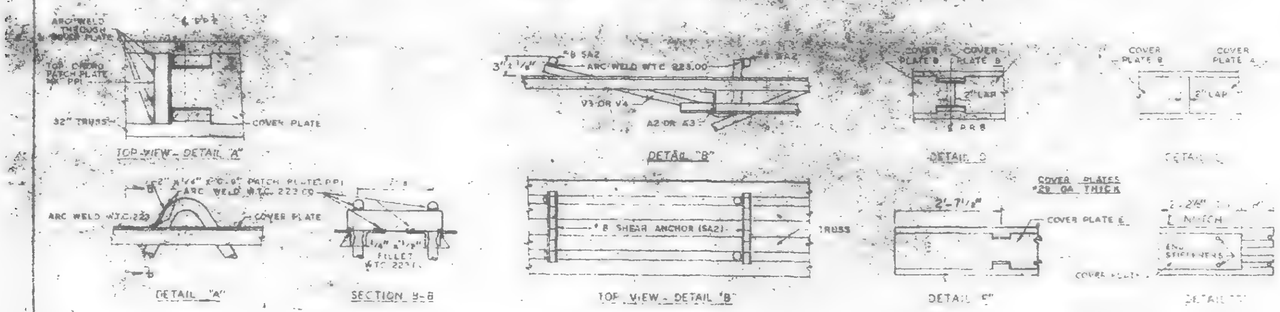


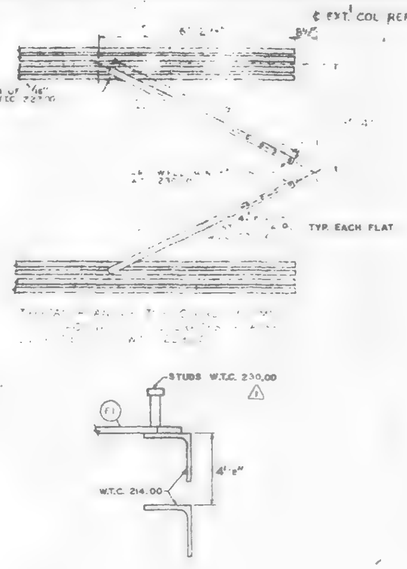
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E11B SIZE 20' x 59'-8½"

CONNECTION 18C & 19C SHOWN ON SHEET CD 204. SPECIAL CONNECTIONS 13C, 16C, & 14C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.





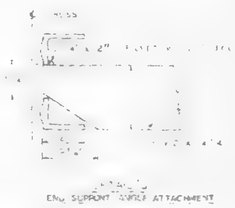


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

MARK	NO.	SIZE	LENGTH	WEIGHT
DIAGONALS	2B	9 8½"		8
	3	32T	58' 10"	203
	4	32T	58' 10"	209
	1C	32	58'-10"	240
	1A	4		208
	1AE	4		208A
	1E	4		208B
	1C	4	15	215
3" x 2" x ¼" ANGLE	A1	4		
	A2	4		
	A4	4	3"x2"x¼" x 43' 3"	57 403
	A8	4	6-6½"	5
DIAGONAL FLAT	F1	4	1'-9⅜" x 6-8	57 402
	A	4		
	B	4	9" x 4.55"	
ANGLE CLIPS	C1	2		
	C2	4		
CONNECTION PLATE	P5	2		
	P6	6		
CONNECTION PLATES	P1	4	3' 2½" x 8" x 6' 2"	
	P2	4	4'-3" x 39" x 10'-9"	
	P3	4	4'-2" x 39" x 10'-0"	
	P5	3	4'-2" x 39" x 10'-0"	400
	P6	4	4'-2" x 39" x 10'-0"	
⅜ SHEAR ANCHOR	A	6	8	57 405
PATCH PLATES	H2	2	4'	

(1) ALL ARC WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL FILLET WELDS TO BE ¼" x 1" FULL THROAT FILLET.



NO	DATE	REVISION	DOC
5	6-19-69	AS NOTED	

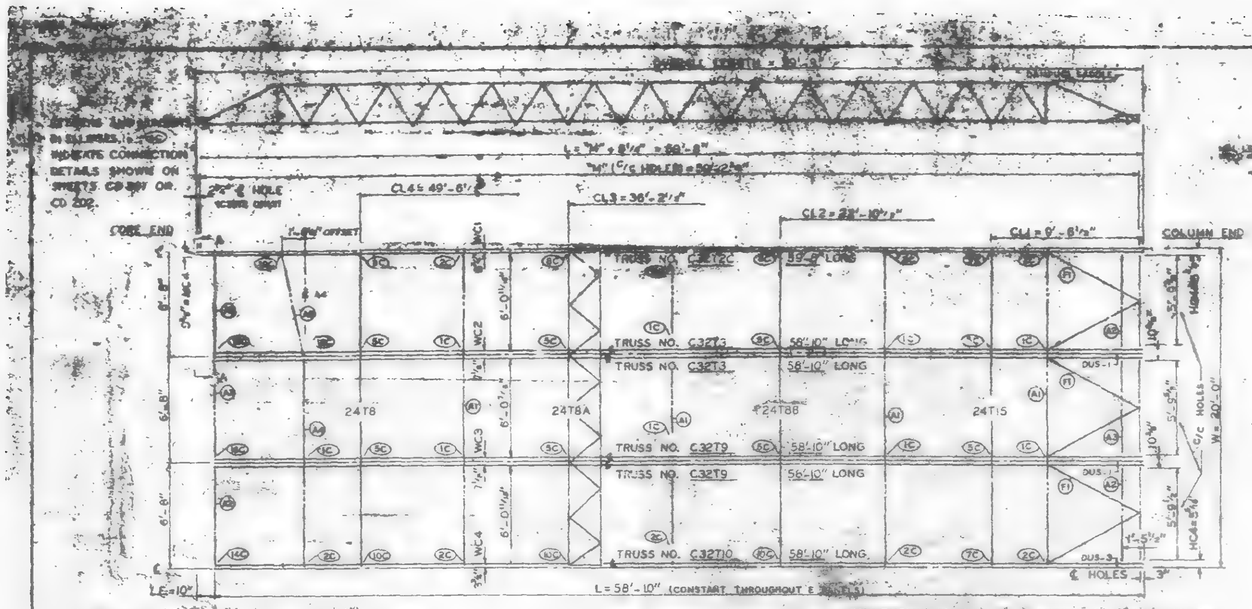
SPEC. A 440 CON. 84-91, 93-106 (N)

BLDG. B FLOORS 84-91, 93-106 (WEST)

E11B 9 8½"

James W. Potter 1/2/70

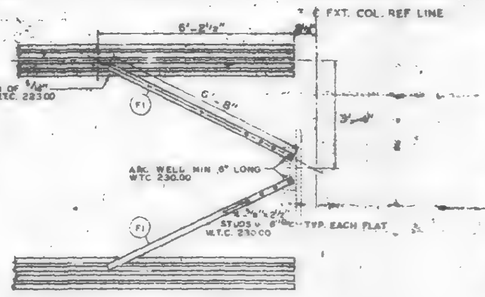
LACLEDE STEEL CO. E11B



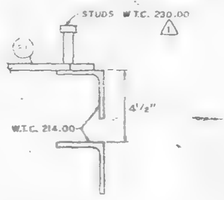
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2 TRUSS.

PANEL NO. E1C SIZE 20' x 59'-8"

CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.



TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

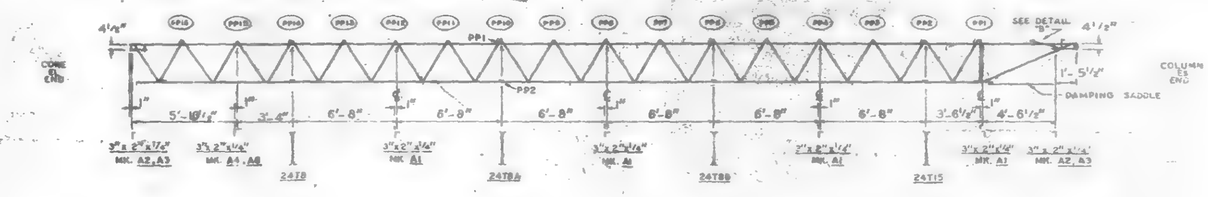


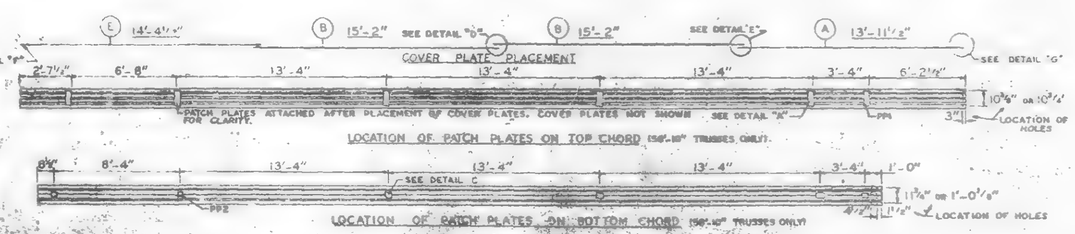
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

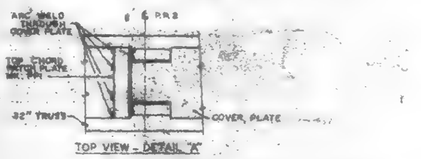
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG.
FLOOR TRUSSES	T2C	1	C32T2C - 59'-8"	ST 202C
	T3	2	C32T3 - 58'-10"	ST 203
	T9	2	C32T9 - 58'-10"	ST 209
	T10	1	C32T10 - 58'-10"	ST 210
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1'-4" x 19'-11"	ST 403
	A2	4	3" x 2" x 2'-4" x 5'-11"	ST 403
	A3	2	3" x 2" x 1'-4" x 5'-11"	ST 403
	A4	1	3" x 2" x 1'-4" x 1'-3"	ST 403
	A5	1	3" x 2" x 1'-4" x 6'-2½"	ST 405
DIAGONAL FLATS	F1	8	1½" x 3½" x 6'-8"	ST 402
COVER PLATES	A	3	8" x .0135" x 13'-11½"	ST 303
	B	8	3" x .0135" x 15'-2"	ST 303
	E	2	9" x .0135" x 14'-8"	ST 303
ANGLE CLIP	C1	20	2" x 1½" x 1½" x 0'-6"	ST 401
	C2	4	3½" x 1½" x 1½" x 6"	ST 401
DAMPING SADDLE	D	2	3½" x 3½" x 3/8" x 10'-0"	ST 208
CONNECTION BAR	CB1	1	1" x [illegible]	ST 401
	CB2	8	¾" x [illegible]	ST 401
	[illegible]	6	[illegible]	ST 401
CONNECTION PLATES	F1	5	3" x 1½" x 8"	ST 401
	F2	1	4" x 1½" x 8"	ST 401
	F3	1	4½" x 1½" x 8"	ST 401
	F4	3	4" x 1" x 1'-4"	ST 401
	F5	3	4" x 1" x 1'-4"	ST 401
	PP	1	4" x [illegible] x 0'-9"	ST [illegible]
"B SHEAR" TOP [illegible]	CA2	8	[illegible] x REQ'D x 0'-8"	ST [illegible]
PATCH PLATES	PP1	18	2" x 1½" x 0'-8"	ST 401
	PP2	18	3" x 3/8" x 0'-8"	ST 401

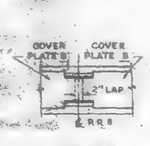
(1) ALL ARC WELD TO BE MADE WITH LOW HY. 40XSN RODS IN THE E-7C SERIES OR EQUAL.

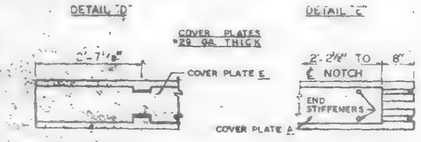
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

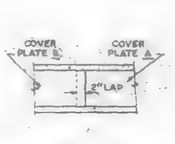


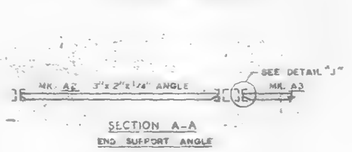


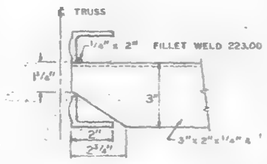












NO	DATE	REVISION
1	8-18-88	AS NOTED

⚠ REF. DRWGS.

7-AB2-38	7-42 E
7-AB3-11	10A - 78
AB4 31	1 3 F
AB4 [illegible] 6/39	[illegible]
7-AB4-42 & 3	10-15 - 58
SA-124	5 - 6 - 64
AB1-3	[illegible]
7-AB1-6, 7 & 8	[illegible]

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

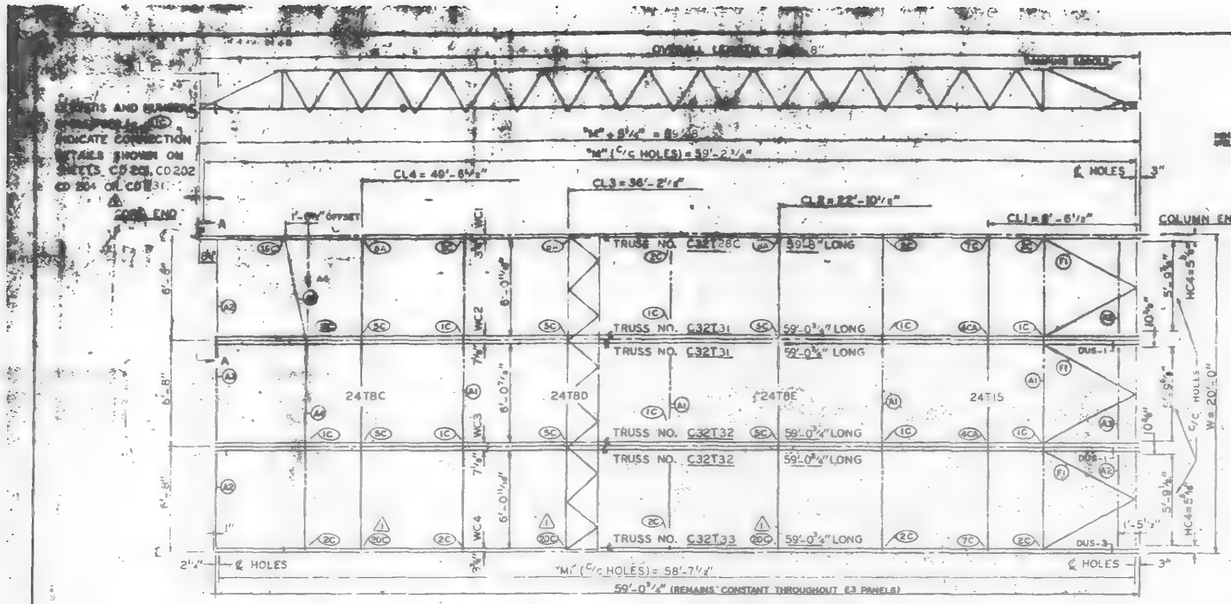
BLDG. A FLOORS 50-58, 60-66, 68-74, 79-91, 93-107 (S)
PANEL E1C - [illegible] OF 8

BLDG. B FLOORS 50-58, 60-74, 79-91, 93-106 (EAST) (S)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS
APPROVED FOR FABRICATION BY James Bowen A.A. DATE 6/2/89
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE

DESIGN DRAWING NO. AB3-41
DRAWN BY [illegible] DATE NOV. 1, 1988
CHECKED BY T.M. CHUNG DATE NOV. 1, 1988
FABRICATION CONT. NO. [illegible]
DETAILED W.T.C. 221 FP E1C

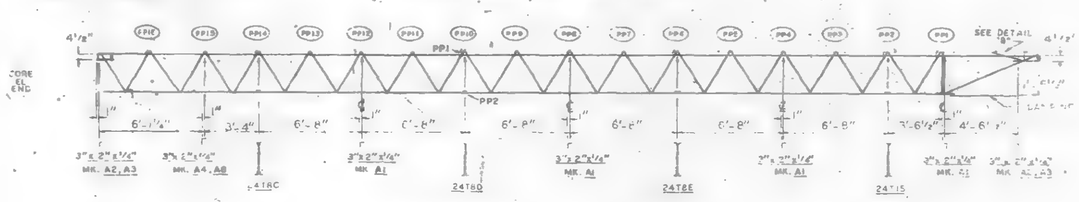


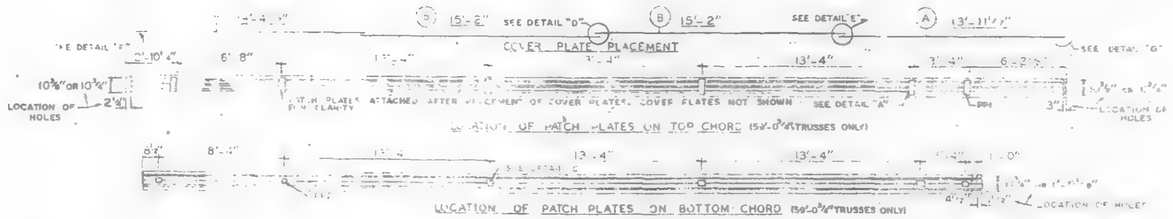
ELEVATIONS AND ELEVATION DIMENSIONS (E) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 203 OR CD 204.

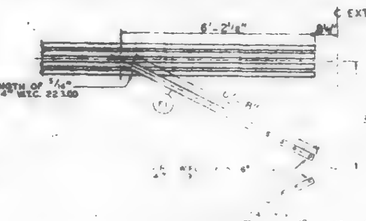
⚠ 20'-0" END

"DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO. E3C SIZE 20' x 59'-8"





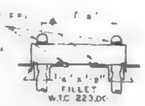


REQUIRED MATERIAL PER PANEL				REF. DRWG.
MATERIAL	MK.	PCS.	SIZE	
FLOOR TRUSSES	T2C	1	C32T28C - 59'-8"	ST 228C
	T31	2	C32T31 - 59'-0¾"	ST 231
	T32	2	C32T32 - 59'-0¾"	ST 232
	T33	1	C32T33 - 59'-0¾"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 19'-11"	ST 208C
	T8D	1	24T8D - 19'-½"	ST 208D
	T8E	1	24T8E - 19'-11"	ST 208E
	TI5	1	24TI5 - 19'-11"	ST 215
3"x 2"x¼" ANGLE	A1	4	3" x 2" x¼" x 19'-11"	ST 403
	A2	4	3" x 2" x¼" x 5'-11"	ST 403
	A3	2	3" x 2" x¼" x 5'-11"	ST 403
	A4	1	3½" x 2" x ¼" x 3'-2"	ST 404
	A8	1	3½" x 2" x ¼" x 6'-5½"	ST 405
DIAGONAL FLATS				ST 402
PLATES	A	3	⅜" x 0'-3⅜" x 13'-11½"	ST 303
	B	8	⅜" x 0'-3⅜" x 15'-2"	ST 303
	L		⅜" x 0'-3⅜" x 16'-4½"	ST 303
CLIP	C1	20	2"x1½"x¼"x 0'-8"	ST 400
	C2	4	2"x1½"x¼" x 6"	ST 400
SADDLE	S1	2	3½"x½"x3"x5'-6½"	ST 298
	S3	1	3½"x½"x6"x5'-6½"	ST 298
CONNECTION BAR	B1	1	1" x 1" - 3"	ST 400
	B2	2	⅝" x 1" - 3"	ST 400
⚠ CONNECTION PLATES	P1A	6	8½" x ½"x 2'-9"	ST 416
	P1	5	3'-4" x ⅜" x 6'-4"	ST 400
	P2	1	4'-1" x ⅜" x 6'-4"	ST 400
	P3	1	4'-1" x ⅜" x 6'-4"	ST 400
	P4	1	4'-1" x ⅜" x 6'-4"	ST 401
"B" SHEAR ANCHOR	SA2	8	⅞" DIA. HEADED x 0'-4"	ST 416
PATCH PLATES	PP1	18	3"x ¼" x 0'-9"	ST 400
	PP2	18	3"x ¾" x 0'-9"	ST 400

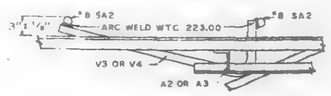
(1) ALL ARC WELD TO BE MADE WITH LOW HY. 10 OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

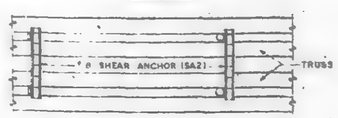
DETAIL "A"



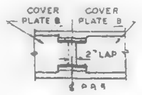
SECTION B-B



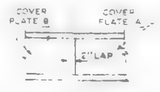
DETAIL "B"



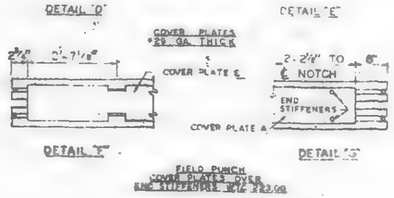
TOP VIEW - DETAIL "B"



DETAIL "D"

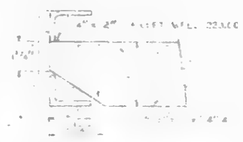


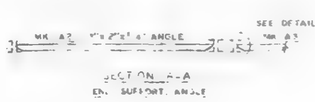
DETAIL "E"



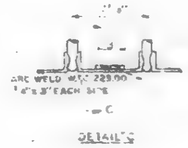
DETAIL "F"

DETAIL "G"

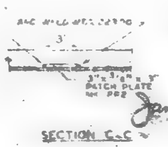




SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

NO.	DATE	REVISION	G.D.C. BY
1	8-6-68	AS NOTED	

28, 10		7-22-68
49		1-6-69
		10-15-68
	5	7-22-68
		10-15-68
24		6-8-69
25 & 28		1-6-69
29 & 30		1-6-69
7-A82-19		1-6-69

PLANT DETAILS

BLDG. A FLOORS 78 (SOUTH)

PANEL E3C - 20'-0" x 59'-8"

BLDG. B FLOORS 78 (EAST)

FABRICATION BY [redacted] STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7.A83.48	PLATE
APPROVED FOR FABRICATION BY [redacted] FOR FABRICATOR	DATE 6/11/69	DRAWN BY GDC DATE APRIL 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE APRIL 2, 1969	IN CHARGE OF PROD. DEV.
DETAILED [redacted]		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP E3C

LETTERS AND NUMBERS IN ELLIPSES (IC) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, AND CD 204 (CIRCLED)

OVERALL LENGTH = 59'-8"

DAMPING SADDLE

"M" + 5 1/16" = 59'-8

"M" (C/C HOLES) = 59'-2 3/4"

℄ HOLES

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/8"

CL2 = 22'-10 1/8"

CL1 = 9'-6 1/2"

3" 6 1/2" OFFSET

COLUMN END

TRUSS NO. C32T28C 59'-8" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T33 59'-0 3/4" LONG

24T8C 24T8D 24T8E 24T15

WC1 WC2 WC3 WC4

HC4=5'-3 3/4"

HC4=5'-6"

W=20'-0"

C/C HOLES

DUS-1 DUS-3

20C

℄ HOLES

"M" (C/C HOLES) = 58'-7 1/8"

59'-0 3/4" (REMAINS CONSTANT THROUGHOUT E3 PANELS)

DIMENSION 'L' VARIES ACCORDING TO LENGTH OF C32T28

PANEL NO. E3C SIZE 20' x 59'-8"

PP1 PP2 PP3 PP4 PP5 PP6 PP7 PP8 PP9 PP10 PP11 PP12 PP13 PP14 PP15 PP16

SEE DETAIL "F"

DAMPING SADDLE

6'-1 1/2" 3'-4" 6'-8" 1'-8" 6'-8" 1" 6'-8" 6'-8" 1" 6'-8" 3'-6 1/2" 4'-6 1/2"

3"x2"x3/16" MK. A2, A3

3"x2"x1/4" MK. A4, A8

3"x2"x1/4" MK. A1

3"x2"x1/4" MK. A4

2"x2"x1/4" MK. A1

3"x2"x1/4" MK. A1

3"x2"x1/4" MK. A2, A3

24T8C 24T8D 24T8E 24T15

L 14'-4 1/2" S 15'-2" SEE DETAIL "D" 9 15'-2" SEE DETAIL "E" A 13'-11 1/2"

COVER PLATE PLACEMENT

SEE DETAIL "F" 2'-10 1/4" 6'-8" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"

10 3/8" OR 10 3/4" LOCATION OF HOLES 2 1/4"

1 INCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

SEE DETAIL "A" PP1 SEE DETAIL "G"

11 3/8" OR 10 3/4" LOCATION OF HOLES 3"

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)

8 1/4" 8'-4" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

SEE DETAIL C

PP2

11 3/8" OR 10 3/4" 1 1/2" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)

TYPICAL FLAT FOR T... END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

℄ EXT. COL. REF. LINE

6'-2 1/2" 8 1/4"

MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00

ARC WELD MIN 6" LONG W.T.C. 223.00

TYP. EACH FLAT

STUDS W.T.C. 230.00

W.T.C. 223.00

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T28C	1	C32T28C - 59'-8"	ST 28C
	T31	2	C32T31 - 59'-0 3/4"	ST 23
	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 19'-11"	BT 208C
	T8D	1	24T8D - 19'-11"	BT 208D
	T8E	1	24T8E - 19'-11"	BT 208E
	T15	1	24T15 - 19'-11"	BT 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 8'-11 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
	A4	1	3'-2" x 1/4" x 1'-3"	ST 403
	A8	1	3 1/4" x 2" x 1/4" x 6'-5 3/8"	ST 405
DIAGONAL FLATS	[illegible]	6	1" x 7/8" x 1'-9"	ST 402
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 303
	E	3	9" x .0135" x 14'-8 1/2"	ST 303
ANGLE CLIPS	C1	10	2 1/2" x 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3/8" x 3 1/2" x 3/8" x 3'-6 3/4"	ST 298
	DUS-3	1	3/8" x 3 1/2" x 3/8" x 3'-6 3/4"	ST 298
CONNECTION BAR	CB1	1	1" x 1" x 1'-3"	ST 400
	CB2	4	5/16" x 1" x 1'-3"	ST 400
	CB3	6	5/8" x 1" x 1'-5"	ST 400
CONNECTION PLATES	[illegible]	5	3" x 1/8" x 1'-3"	ST 400
	PC	1	4 1/2" x 1/4" x 1'-8"	ST 400
	PD	1	4" x 1/4" x 1'-6"	ST 400
	PE	3	4" x 1/4" x 1'-6"	ST 400
	PF	1	4" x 1/4" x 1'-6"	ST 401
"B" SHEAR ANCHOR	SA2	8	1" x 8" STUD SHEAR x 0'-3"	ST 404
PATCH PLATES	PP1	18	3" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/16" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4" B = 1/4"

1"

62 x 2 1/2" x 2-9"

ARC WELD THROUGH COVER PLATE TO TOP CHORD PATCH PLATE MK. PP1

TOP CHORD TRUSS

COVER PLATE

TOP VIEW - DETAIL "A"

2" x 1/4" x 0'-9" PATCH PLATE PP1

ARC WELD W.T.C. 223.00

COVER PLATE

8"

DETAIL "A"

7'-8"

1/4" x 1 1/2" FILLET W.T.C. 223.00

SECTION B-B

3 1/2" 1/8" #8 SA2 ARC WELD W.T.C. 223.00 #8 SA2

V3 OR V4

A2 OR A3

DETAIL "B"

TOP VIEW - DETAIL "B"

#8 SHEAR ANCHOR (SA2)

TRUSS

COVER PLATE B COVER PLATE B

2" LAP

℄ PP9

DETAIL "D"

COVER PLATE B COVER PLATE A

2" LAP

DETAIL "E"

2 1/2" 2'-7 1/2"

COVER PLATE E

COVER PLATE A

DETAIL "F"

COVER PLATES #29 GA. THICK

2'-2 1/2" TO 8" ℄ NOTCH

END STIFFENERS

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

SEE DETAIL "J"

MK. A2 3" x 2" x 1/4" ANGLE MK. A1

SECTION A-A

END SUPPORT ANGLE

7'-8"

3"

ARC WELD W.T.C. 223.00 1/4" x 3" EACH SIDE

DETAIL "C"

ARC WELD W.T.C. 223.00

3" 3/4" x 3" PATCH PLATE MK. PP2

SECTION C-C

TRUSS

1/4" x 2" FILLET WELD 223.00

1 1/4" 3" 2 1/2"

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

PFEFFERKORN NO.

7-A82-10	7-22-68
7-A84-49	1-6-69
7-A84-8	10-15-68
7-A84-8 & 18	7-22-68
7-A84-42	10-15-68
SA-124	1-6-69
7-A81-25-A 28	1-6-69
7-A81-29 & 30	1-6-69
7-A82-19	1-6-69

CHRISTIANSEN ROBERTSON
Structural & Civil Engineers

APPROVED AS NOTED
RESUBMIT
7/31/69

PORT AUTHORITY OF N.Y. & N.J.

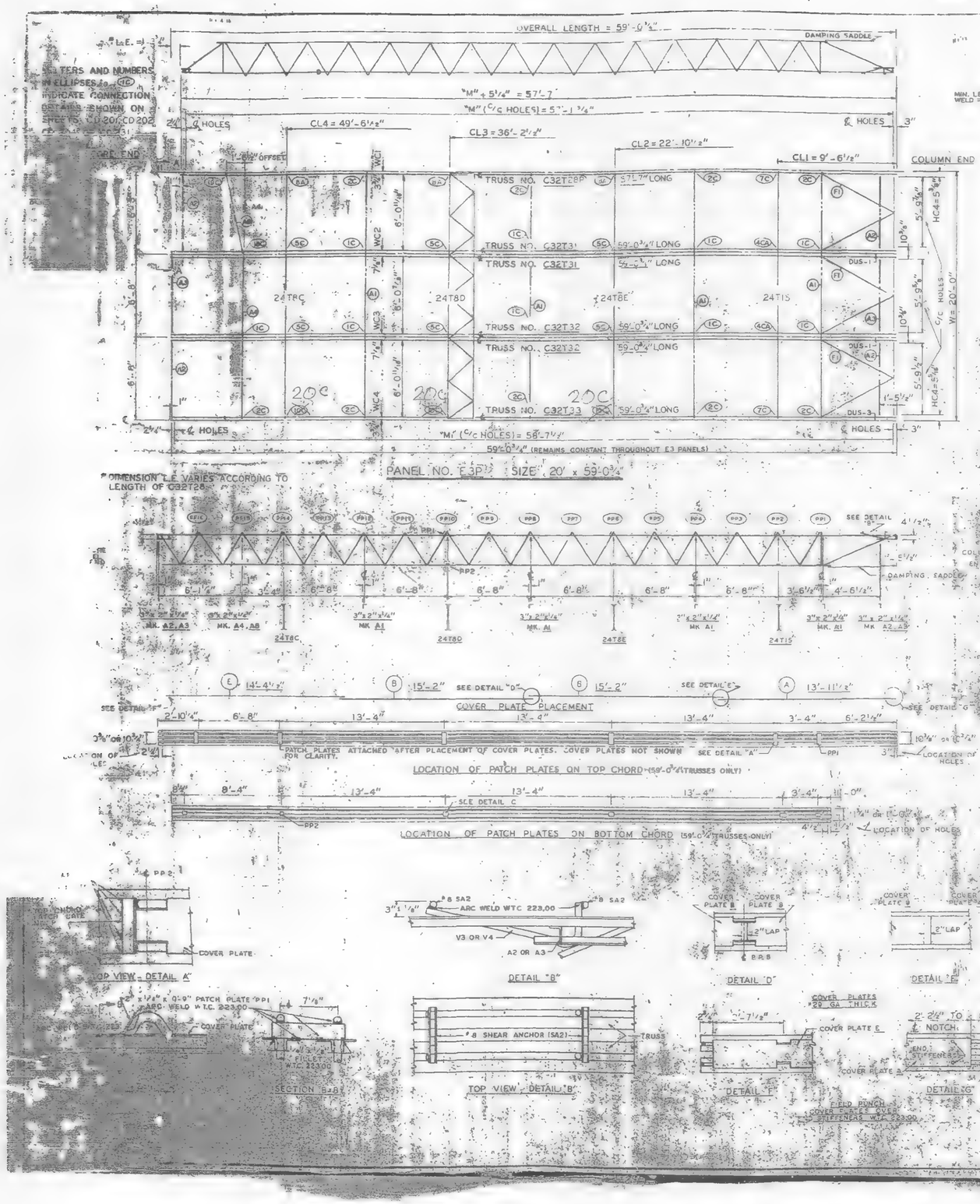
BLDG. A FLOORS 78 (SOUTH)

PANEL E3C - 20' x 59'-8"

BLDG. B FLOORS 78 (EAST)

FABRICATION BY MACEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 AB3 49	PLATE
APPROVED FOR FABRICATION BY PORT AUTHORITY OF N.Y. & N.J.	DATE	DRAWN BY: gdc DATE APRIL 2, 1969	
APPROVED FOR FABRICATION BY FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE APRIL 2, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]		FABRICATION CONT. NO. W.T.C. 221	SHEETS NO. FP E3C



REQUIRED MATERIAL PER PANEL				SEE DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T28P	1	C32T28P 57'-7"	ST 28P
	T31	2	C32T31 - 59'-0 3/4"	ST 231
	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
BRIDGING TRUSSES	TBC	1	24'BC - 19'-11"	BT 24BC
	TBC	1	24'BC - 19'-11"	BT 24BC
	TBE	1	24'BE - 19'-11"	BT 24BE
	TIS	1	24'IS - 19'-11"	BT 24IS
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 4" x 19'-1"	ST 403
	A2	4	3" x 2" x 4" x 5'-11"	ST 403
	A3	2	3" x 2" x 4" x 5'-6"	ST 403
	A4			ST 405
	A8			ST 405
DIAGONAL PLATES				
				ST 403
PLATES				ST 403
				ST 403
FACE CLIPS	C1		2" x 3" x 4" x 0'-8"	ST 400
	C2	4	2" x 3" x 6" x 6"	ST 400
AMPION SADDLE	S	2	3" x 3" x 3" x 3'-6"	ST 228
CONNECTION BAR	CB1			ST 400
	CB2		5/16 x 3"	ST 400
	CB	8	6"	ST 400
CONNECTION PLATES		5		ST 400
	PI		x 2'-0"	ST 400
	P		x 3'-0"	ST 400
	P5		x 1'-6"	ST 400
	P		x 0'-8"	ST 400
8 SHEAR ANCHOR	SA2		8" x 4" x 0'-2"	
PATCH PLATES	PP1	18	2" x 14" x 0'-8"	ST 400
	PP2	18	3" x 7 1/8" x 0'-9"	ST 400

62 x 6" x 2'-9"

(1) ALL ARC WELD TO BE MADE WITH LOW HYD. E-XXX RODS IN THE E-70 SERIES OR EQUIV.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4"
B = 1/4"

NO.	DATE	REVISION	BY

REF. DRWGS.

7-A82-10	7-22-68
7-A83-49	1-6-69
7-A84-3	10-15-68
7-A84-15 & 16	7-22-68
7-A84-42	10-15-68
SA-124	1-6-69
7-A81-25 & 28	1-6-69
7-A81-29 & 30	1-6-69
7-A82-19	1-6-69

COLUMN HELE CENTERLINE OF COLUMN

FLOOR PANEL DETAILS

FOR

WORLD TRADE CENTER - N.Y.C.

FOR

PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 78 (NORTH)

PANEL E3P 20' x 59'-0 3/4"

BLDG. B FLOORS 78 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-49	PLATE 1
APPROVED FOR FABRICATION BY: FOR PORT A.	DATE	DRAWN BY: GGG DATE APRIL 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M. CRURA DATE APRIL 2, 1969	IN CHARGE OF PROD. DEV.
DETAILED		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP E3P

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 & CD 204 OR CD 231.

*L.E. = 7¼"

CRANE LENGTH = 59'-

CAMBER SAMPLE

"M" = 59'-0"

59'-7"

℄ HOLES

CL2 = 22'-10"

CL1 = 9'-6½"

COLUMN END

CORE END

TRUSS NO. C32T33 59'-0" LONG

TRUSS NO. C32T32 59'-0" LONG

TRUSS NO. C32T31 59'-0" LONG

TRUSS NO. C32T28C 59'-8" LONG

DUS-3

DUS-1

24T8C

24T8D

HC4=3¾"

HC3=5"

HC2=6¾"

HC1=8½"

W=20'-0"

1'-6½" OFFSET

"M" (℄ HOLES) = 59'-2¾"

59'-8"

PANEL NO. ER3C SIZE 20' x 59'-8"

*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PP1 PP2 PP3 PP4 PP5 PP6 PP7 PP8 PP9 PP10 PP11 PP12 PP13

SEE DETAIL "B"

DAMPING SADDLE

24T8C 24T8D 24T8E 24T8S

SEE DETAIL "E" SEE DETAIL "D" SEE DETAIL "A" SEE DETAIL "C"

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0¾" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0¾" TRUSSES ONLY)

LOCATION OF HOLES

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES NOT SHOWN FOR CLARITY.

℄ EXT. COL. REF. LINE

MIN. LENGTH OF 5/16" WELD = 2" W.T.C. 223.00

ARC WELD MIN. 6" LONG W.T.C. 230.00

TYP. EACH FLAT

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL CRUSS BRACES WELDED OVERHEAD BY ARC W.T.C. 223.00

STUDS W.T.C. 230.00

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4½" ABOVE COLUMN CLIPS FOR TRUSS BEARING

REQ'D	MARK			
TOP CHORD SPLICE	T28C	1	C32T28C - 59'-8"	ST 228C
	T31	2	C32T31 - [illegible]	ST 231
	T32	2	C32T32 - 59'-0"	ST 232
	T33	1	C32T33 - [illegible]	ST 233
BRIDGING TIE PL	T8C	1	[illegible] 19'-11"	BT [illegible] 8C
	T8D	1	[illegible] 19'-11"	BT [illegible] 8D
	T8E	1	[illegible] 19'-11"	BT [illegible] 8E
	T1	1	[illegible] 6'-11"	BT [illegible] 1"
3½" x 2½" x ¼" ANGLE	A1	2	[illegible] 19'-11"	ST 403
	A2	4	[illegible]	ST 403
	A3	1	[illegible]	403
	A4	1	[illegible]	403
	A8	1	[illegible]	ST 403
DIAGONAL FLATS	A	1	1.0134" x 19-11½"	ST 103
WEB PLATE	B	1	x .0135" x 15'-2"	ST 103
	L	1	x .0135" x 4'-2½"	ST 103
ANGLE CLIP	C1	2	2"x 2½" x ¼" x 0'-6"	ST 400
	C2	4	2½" x 2½" x ¼" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3½" x 3½" x 5/16" x 3'-0"	ST 255
	DUS-3	1	3½" x 3½" x 5/16" x 3'-0"	ST 255
CONNECTION BAR	CB1	1	½" x 1" x 3'-0"	ST 400
	CB2	1	½" x 1" x 1'-3"	ST 400
CONNECTION PLATES	PL5	6	½" x 1'-2½" x 2'-9"	ST 416
	P1	5	3/16" x 1'-0" x [illegible]	ST 400
	P2	1	3/16" x 2'-3" x [illegible]	400
	P3	1	3/16" x 2'-3" x [illegible]	ST 400
	P5	1	3/16" x 1'-6" x 1'-6"	ST 400
	P6	1	3/16" x 1'-6" x [illegible]	ST 400
[illegible] SPLICE	S42	1	[illegible]	[illegible]
PATCH PLATES	PP1	4	3" x 4'-0" x 1'-0"	ST 400
	PP2	8	3" x 2'-4" x 3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" x 1" FULL THROAT FILLET.

A = ¼"
B = ¼"

ARC WELD THROUGH COVER PLATE

TOP CHORD PATCH PLATE MK PP1

32" TRUSS

TOP VIEW - DETAIL 'A'

ARC WELD W.T.C. 223.00

COVER PLATE

DETAIL "A"

SECTION B-B

"B" SA2

ARC WELD W.T.C. 223.00

A2 OR 4

DETAIL "B"

"B" SHEAR ANCHOR (SA2)

TRUSS

TOP VIEW - DETAIL 'B'

COVER PLATE B

COVER PLATE D

2" LAP

DETAIL "D"

COVER PLATE E

COVER PLATE A

DETAIL "E"

COVER PLATES #20 GA. THICK

COVER PLATE E

NOTCH

END STIFFENERS

COVER PLATE A

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

DETAIL "G"

DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

SECTION A-A

END SUPPORT ANGLE

ARC WELD W.T.C. 223.00 ⅜" x 3" EACH SIDE

DETAIL "C"

ARC WELD W.T. 223.00 3"

3" x 3'-4" x ⅜" PATCH PLATE MK PP2

SECTION C-C

8-4-69	AS NOTED	C.O.F.
DATE	REVISION	BY

7-[illegible]	7-22-68
7-AB3-50	1-6-69
[illegible]	10-15-68
[illegible]	7-22-68
7-AB4-42	10-15-68
SA-42	1-6-69
7-AB [illegible] 29 & 30	1-6-69
7-AB [illegible] 33 & 34	1-6-69
7-AB2-19	1-6-69

[illegible]

THE [illegible] CORPORATION

BLDG. 5 [illegible] 78 (SOUTH)

TRUSS NO. ER3C - [illegible] - 59'-8"

BLDG. B FLOORS 78 (EAST)

FABRICATED BY ALLEGHENY STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7 AB3 50

PLATE [illegible]

APPROVED FOR FABRICATION FOR P.O.M.K.A. BY [illegible] DATE 8/11/69

DRAWN BY [illegible] DATE APRIL 2, 969

APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE

CHECKED BY T.M. CHURA DATE APRIL 2, 969

IN CHARGE OF PROD. DEVT.

DETAILED BY A. CARL WEBER

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. CD ER3C

OVERALL LENGTH = 59'-

DAMPING SADDLE

"M" = 5'1/4" = 59'-0 3/4"

"M" (℄ HOLES) = 58'-7 1/2"

℄ HOLES 3"

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/2"

CL2 = 22'-10 1/2"

CL1 = 9'-6 1/2"

COLUMN END

TRUSS NO. C32T33 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T28C 59'-8" LONG

20c 20c 20c

24T6C 24T8D 24T8E 24T15

WC1 WC2 WC3 WC4

DUS-3

HC4=5'-9"

HC4=5'-9"

WC=20'-0"

℄ HOLES 1'-6 1/2" OFFSET ℄ HOLES 3"

"M" (℄ HOLES) = 59'-2 3/4"

59'-8"

* DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO. ER3C SIZE 20' x 59'-8"

PP1 PP2

SEE DETAIL "B"

DAMPING SADDLE

4'-6 3/4" 4'-10 1/2" 8'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6 1/2" 4'-6"

3"x3"x1/4" MK. A2 3"x3"x1/4" MK. A8 3"x3"x1/4" MK. A1 3"x3"x1/4" MK. A1 3"x3"x1/4" MK. A1 3"x3"x1/4" MK. A1 3"x3"x1/4" MK. A1 3"x3"x1/4" MK. A2, A3

24T6C 24T8D 24T8E 24T15

E 14'-4 1/2" B 15'-2" SEE DETAIL "D" B 15'-2" SEE DETAIL "E" A 13'-11 1/2"

SEE DETAIL "F" SEE DETAIL "G"

COVER PLATE PLACEMENT

2'-10 1/4" 6'-8" 13'-4" 3'-4" 13'-4" 3'-4" 6'-2 1/2"

10 3/8" OR 10 3/4" LOCATION OF HOLES 2 1/2" LOCATION OF HOLES

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER - TYP. COVER PLATES NOT SHOWN - SEE DETAIL "A" FOR CLARITY.

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)

8" 8'-4" 13'-4" SEE DETAIL C 13'-4" 13'-4" 3'-4" 1'-0"

LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)

ARC WELD THROUGH COVER PLATE

PP2

COVER PLATE

TOP VIEW - DETAIL "A"

2"x3 1/2"x1/4" x 0'-0.9" PATCH PLATE PP1 ARC WELD W.T.C. 223.00

WELD W.T.C. 223

COVER PLATE

7 1/8"

1/4" FILLET W.T.C. 223.00

SECTION B-B

* B SHEAR ANCHOR (SA2)

TRUSS

TOP VIEW - DETAIL "B"

* B SA2

ARC WELD W.T.C. 223.00

V3 OR V4

A2 OR A3

DETAIL "B"

COVER PLATE B PLATE B

2" LAP

DETAIL D

COVER PLATE B PLATE A

DETAIL E

2'-7 1/2"

COVER PLATE E

COVER PLATES #28 GA. THICK

2'-2" TO ℄ NOTCH

END STIFFENERS

COVER PLATE A

DETAIL "F"

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL BRACES WELDED VERT. DECK BY W.T.C. 223.10

ARC WELD MIN. 6" LONG W.T.C. 219.00

3/8" x 6" TYP EACH FLAT W.T.C. 230.00

STUCK W.T.C. 230.0

W.T.C. 214.00

ANGLE CLIP AT TOP DIAGONAL FLATS AT ABOVE COLUMN LINE FROM TRUSS BEARING

REQUIRED MATERIAL PER PANEL

MATERIAL	Mk	PCS.	SIZE	REF DRWG.
FLOOR TRUSSES	T28C	1	C32T28C - 59'-8"	ST 228C
	T31	2	C32T3. - 59'-0 3/4"	ST 231
	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
ROOFING TRUSSES	T8C	1	[illegible]	ST 8C
	T8D	1	[illegible]	ST 8D
	T8E	1	[illegible]	ST 8E
	T15	1	[illegible]	ST 15
[illegible] ANGLES	A1	4	[illegible]	ST 4C3
	A2	4	[illegible]	ST 4C3
	A3		[illegible]	ST 4C3
	A6		[illegible]	ST 4C3
[illegible] FLATS	A		[illegible]	ST 4C3
	B		[illegible]	ST 4C3
[illegible] PLATES	C1		[illegible]	ST 4C3
[illegible]	A		[illegible]	2-8
CONNECTION PLATES	E1		[illegible]	4-0
	E2		[illegible]	4-0
ANGLE CLIP PLATES	F1		[illegible]	4-D
	F2		[illegible]	4-D
	F3		[illegible]	4-D
	F4		[illegible]	4-D
	F5		[illegible]	4-D
	F6		[illegible]	4-D
	F7		[illegible]	4-D
	F-1		[illegible]	4-DC
	F-2		[illegible]	4-DC

6"x1/2" x2'-9"

(1) ALL FIELD WELDS TO BE MADE WITH LOW HYDROGEN RODS IN THE FLAT POSITION UNLESS OTHERWISE SHOWN.

(2) CONNECTION ARC WELDS TO BE 1/4" FILLET THROAT FILLET.

A=1/4" B=1/4"

REVISIONS

7-AB3-10	1-22-68
7-AB3-50	1-6-69
	10-15-68
	1-22-69
	2-10-69
S[illegible]-4	1-6-69
7-AB[illegible]-29 & 30	1-6-69
[illegible]-33 & 34	1-6-69
7-AB2-19	1-6-69

SKILLING HELLE CHRISTIANSEN ROBERTSON Engineers

[illegible] 78 (SOUTH)

[illegible] ER3C - [illegible] 59'-8"

BLDG. B FLOORS 78 (EAST)

[illegible] ATTEN. BY [illegible] ACME [illegible] COMPANY

FARM DATE: MADISON, ILLINOIS

APPROVED FOR FABRICATION DATE

BY FOR P.O.N.Y. A.

APPROVED FOR FABRICATION DATE

BY FOR FABRICATION

DETAILED [illegible]

DESIGN DRAWING NO. 2 AB3 50

DRAWN BY DATE APRIL 2, 1969

CHECKED BY T.M. CHURA IN CHARGE

DATE APRIL 2, 1969 PROD. SEQ.

FABRICATION CODE NO. W.T.C. 231 SHEET C

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD-201, CD202 OR CD 2C4 OR CD 231.

OVERALL LENGTH = 59'-0 3/4"

DAMPING SADDLE

℄ HOLES 3"

℄ COL = 9'-6 1/8"

COLUMN END

24T8C 24T8D 24T8E 24T1S

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T28N 57'-9" LONG

℄ HOLES 2 1/4" 1'-6 1/8" OFFSET ℄ HOLES 3"

"M" (℄ HOLES) = 57'-3 3/4"

57'-9"

L.E. = 1'-3 3/4"*

*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO ER3N SIZE 21' x 59'-0 3/4"

PP1 PP2 SEE DETAIL B

3'-3" 4'-10 1/2" 6'-8" 6'-8" 6'-8" 6'-8" 4'-6 1/2"

24T8C 24T8D 24T8E 24T1S

B 15'-2" SEE DETAIL "D" C 15'-2" SEE DETAIL E A 13'-

SEE DETAIL 2'-10 1/4" 6'-8" 13'-4" 13'-4" 13'-4" 6'-8"

GUSSET PLATE PLACEMENT

LOCATION OF HOLES

GUSSET PLATES ATTACHED TO OUTSIDE FACE OF OUTSIDE CHORD

WEB PLATES NOT SHOWN

GUSSET PLATES ON INSIDE FACE OF CHORD (59'-0" TRUSSES ONLY)

DETAIL A

SECTION B-B

DETAIL D

DETAIL E

DETAIL F

DETAIL G

SECTION C-C

FIELD PUNCH COVER PLATES OVER END STIFFENERS

COVER PLATES .29 (OR THICK

℄ EXT. COL. REF. LINE

MIN. LENGTH OF 3/16" WELD = 4" W.I.C. 223.00

DETAIL OF PLAN AT EXTERIOR DIAGONAL OVER DECK BY W.I.C. 223.00

STUDS W.I.C. 230.10

W.I.C. 214.03

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE TOP OF CLIP FOR THESE BEARINGS

T28N	2	C32T28N - 57'-9"	228N
T31	2	C32T31 - "	231
T32	2	C32T32 - 59'-0 3/4"	232
T33	2	C32T33 - "	233
C		C	8C
E		E	5
			3
			4Z

CLIP ANGLE	C1	6"x4"x1/2"x0'-8"	2-8
DAMPING SADDLE	DUS-3	3"x3"x1/4"x2'-0"	2-0
CONNECTION BA5	CE2	6"x4"x1/2"x2'-9"	4-0
	PIS 6	6"x4"x1/2"x2'-9"	6-0
CONNECTION PLATE	F1		2-10
	F5		4-00
	F6		2-04
	SA2		2-06
PAD PLATE	P2	9"	57-00
	P3	9"	4-00

(1) ALL FIELD WELDS OF ANGLE & TEE CONNECTIONS ARE TO BE IN THE FLAT POSITION.

(2) UNLESS OTHERWISE SHOWN, CONNECTION ARC WELDS TO BE 1/4" MIN. FULL THROAT FILLET.

A = 1/4"
B = 1/4"

5	8-4-69	AS NOTED	G.D.C.
4	4-24-69	AS NOTED	G.D.C.

7-A63-50	22-A8 1-6-69
	10-15-A8 1-6-69
	7-22-A8 1-6-69
	10-5-A8 1-6-69
	29 & 30 1-6-69
	33 & 34 1-6-69
7-A82-19	1-6-69

44 (NORTH ONLY)

ER3N 57'-0"

BLDG. B FLOORS 44 (EAST & WEST)

8/11/69

APRIL 2, 1969

APRIL 2, 1969

221

SHEET NO. FP ER3N

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 204 OR CD 231.

OVERALL LENGTH = 59'-0 3/4"

DAMPING SADDLE

"M" + 5 1/4" = 57'-9"

"M" (C/C HOLES) = 57'-3 3/4"

L.E. = 1'-3"

℄ HOLES

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/2"

CL2 = 22'-10 1/2"

CL1 = 9'-6 1/2"

CORE END

COLUMN END

1'-6 1/2" OFFSET

TRUSS NO. C32T28N 57'-9" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T33 59'-0 3/4" LONG

24T8C 24T8D 24T8E 24T1S

WC1 WC2 WC3 WC4

HC4 = 5 3/4"

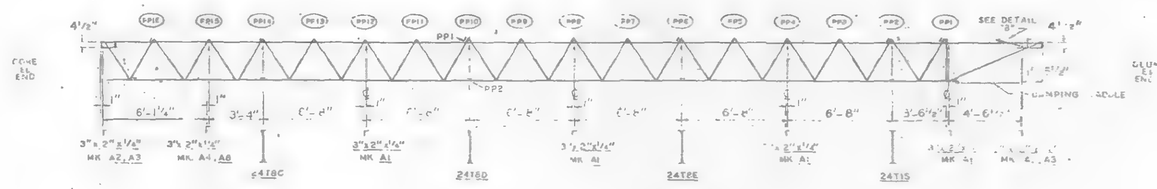
W = 20'-0"

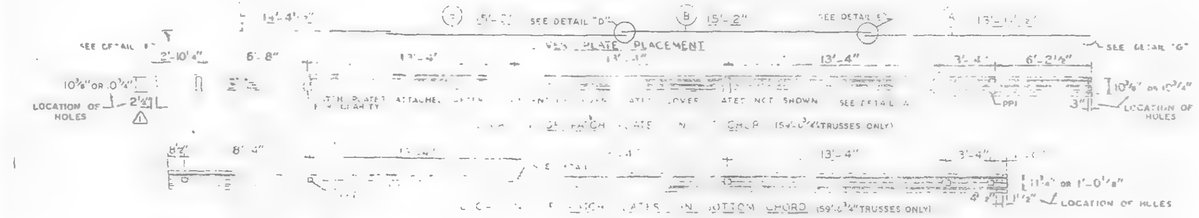
"M" (C/C HOLES) = 58'-7 1/4"

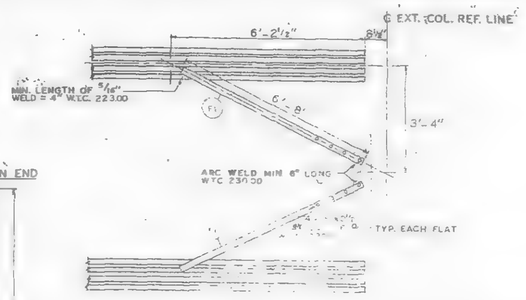
59'-0 3/4" (REMAINS CONSTANT THROUGHOUT E3 PANELS)

"DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO. E3N SIZE 20' x 59'-0 3/4"



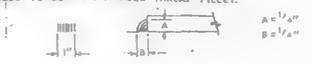


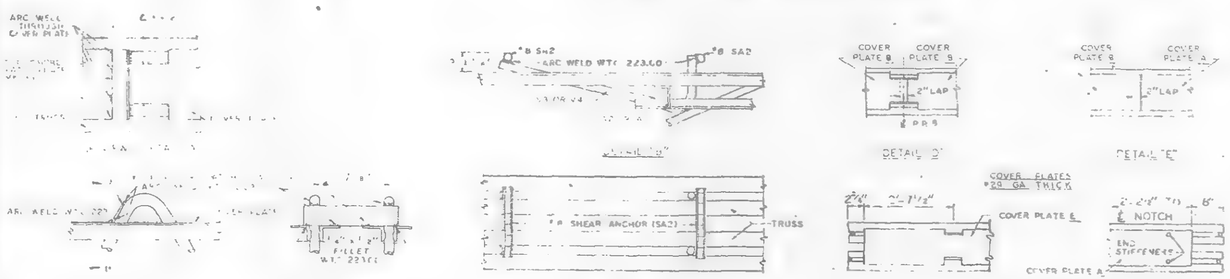


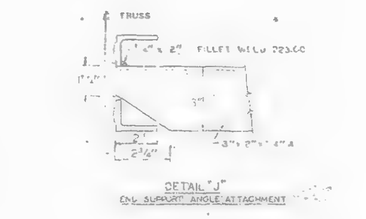
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T28N	1	C32T28N - 57'-9"	ST 228N
	T31	2	C32T31 - 59'-0 3/4"	ST 231
	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 19'-11"	BT 208C
	T8D	1	24T8D - 19'-11"	BT 208D
	T8E	1	24T8E - 19'-11"	BT 208E
	T1S	1	24T1S - 19'-11"	BT 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
	A4	1	3" - 2" x 1/4" x 1'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-5 3/8"	ST 405
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-9"	ST 402
GUSSET PLATES	A	3	0" x .0135" x 13'-11 5/8"	ST 303
	B	6	0" x .0135" x 15'-2"	ST 303
	E	3	0" x .0135" x 14'-4 1/2"	ST 303
ANGLE CLIPS	C1	10	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/4" x 3'-8 1/4"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/4" x 3'-8 1/4"	ST 298
CONNECTION BAR	CB1	1	1" x 1" x 3"	ST 400
	CB2	1	1" x 1" x 3"	ST 400
CONNECTION PLATES (2)	P1*	8	8 1/2" x 1/2" x 2'-9"	ST 416
	P2	5	4" x 3/8" x 1'-8"	ST 400
	P2	1	4 1/2" x 3/8" x 1'-0"	ST 400
	P3	1	4 1/2" x 3/8" x 1'-0"	ST 400
	P5	2	4" x 1/4" x 1'-6"	ST 400
	P6	1	4" x 1/4" x 1'-4"	ST 401
SHEAR ANCHOR	SA2	12	3" HEAD x 0'-4"	ST 4 C
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

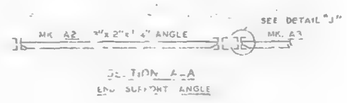
(1) ALL ARC WELD TO BE MADE WITH LOW HY. IRON RODS IN THE E-7C SERIES OR EQUAL.

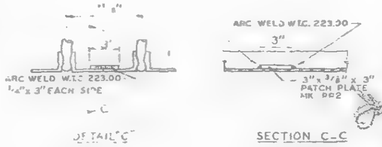
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.











2	8-4-69	AS NOTED	G.D.C.
1	4-24-69	AS NOTED	G.D.C.
NO.	DATE	REVISION	BY

REF. DRWGS.

7-A95-10	7-22-68
7-A81-49	1-6-69
7-A94-4	10-15-68
7-A84-5 & 6	7-22-68
7-A84-42	10-15-68
Sht. 124	1-6-69
7-A81-25 & 26	1-6-69
7-A81-29 & 30	1-6-69
7-A82-19	1-6-69

FLOOR PANEL DETAILS

FOR

WORLD TRADE CENTER - N.Y.C.

FOR

THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 44 (NORTH ONLY)

PANEL E3N - 20' x 59'-0 3/4"

BLDG. B FLOORS 44 (WEST & EAST) 1

FABRICATED BY A. C. F. STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7 AB3 49

PLATE

APPROVED FOR FABRICATION FOR P.O.N.Y.A. DATE 8/11/69

DRAWN BY gdc

DATE APRIL 2 1968

APPROVED FOR FABRICATION BY FOR FABRICATOR DATE

CHECKED BY T.M.CHUBA

DATE APRIL 2, 1969

IN CHARGE OF PROD. DEV.

DETAILED BY A. CARL WEBER

FABRICATION CONT. NO. W.T.C. 221

SHEET NO. FP E3N

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 204 OR CD 231.

⚠ 7 CORE END

OVERALL LENGTH = 59'-0 3/4"

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T28N (8A) 57'-9" LONG

"M" (℄ HOLES) = 57'-3 3/4"

57'-9"

1'-6 1/2" OFFSET

24T8C 24T8D 24T8E 24T15

PANEL NO. ER3N SIZE 20' x 59'-0 3/4"

* DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

SEE DETAIL "D" SEE DETAIL "E" SEE DETAIL "F"

COVER PLATE PLACEMENT

LOCATION OF PATCH PLATES ON TOP CHORD (58'-0 3/4" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)

℄ EXT. COL. REF. LINE

MIN LENGTH OF 5/16" WELD = 4" WTC. 22300

STUDS WTC 230.0

MARK	QTY	SIZE	LENGTH	WEIGHT
T28N	1	C32T28N	57'-9"	228N
T31	2	C32T31	59'-0 3/4"	231
T32	2	C32T32	59'-0 3/4"	232
T33	1	C32T33	59'-0 3/4"	233
		C		
		D		
		E		
ANCHOR BAR				
CONNECTION PLATE				
PATCH PLATES				

(1) ALL FWC WELD TO BE MADE WITH LOW HY-80N RODS IN THE E-70 SERIES OF ELECTRODES.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/2" FULL THROAT FILLET.

DETAIL "A"

DETAIL "B"

DETAIL "C"

DETAIL "E"

DETAIL "F"

DETAIL "G"

SECTION B-B

SECTION C-C

TOP VIEW - DETAIL A

TOP VIEW - DETAIL B

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00

NO.	REVISION	BY	DATE
7	4-24-69 AS NOTED	GDC	
7-92.10			7-22-68
7-AB3-50			1-6-69
			10-15-68
			7-22-68
			10-15-68
			1-6-69
7-AB1 29 & 30			1-6-69
7-AB1 33 & 34			1-6-69
7-AB2-19			1-6-69

44 (NORTH ONLY)

℄ ER3N - 59'-0 3/4"

BLDG. B FLOORS 44 (EAST & WEST)

DRAWN BY	GDC
DATE	APRIL 2, 1969
CHECKED BY	M. CENDURA
DATE	APRIL 2, 1969
PROD. DEV.	
FABRICATION CONT. NO. WTC	221
SHEET NO.	CD ER3N

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD-201, CD 202 CD 204 OR CD 231.

CORE END

OVERALL LENGTH = 59'-0 3/4"

DAMPING SADDLE

"M" = 5'-7 1/4" - 5 1/16"

"M" (C/C HOLES) = 57'-1 3/4"

℄ HOLES

CL4 = 49'-8 1/4"

CL3 = 36'-2 1/2"

CL2 = 22'-10 1/2"

CL1 = 9'-6 1/2"

1'-6 1/2" OFFSET

COLUMN END

TRUSS NO. C32T28P 57'-7" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T33 59'-0 3/4" LONG

24T8C 24T8D 24T8E 24T1S

WC1 WC2 WC3 WC4

DUS-1 DUS-2 DUS-3

HC4=5 3/8"

C/C HOLES W=20'-0"

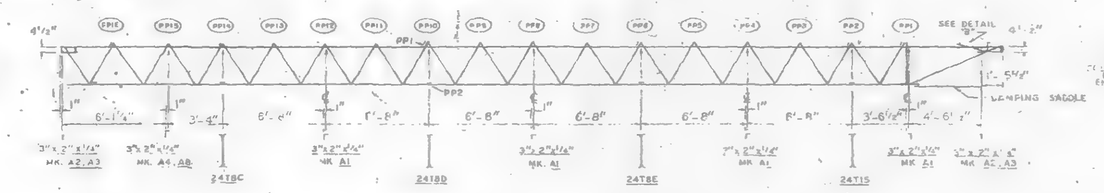
℄ HOLES

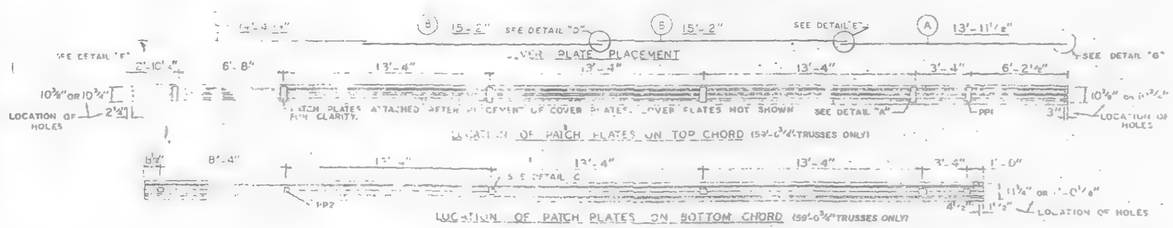
"M" (C/C HOLES) = 58'-7 1/4"

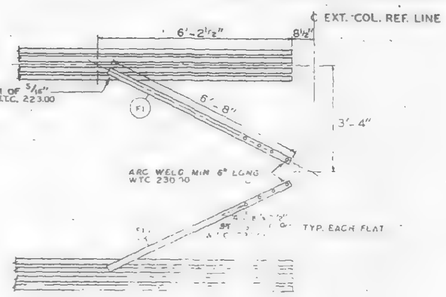
59'-0 3/4" (REMAINS CONSTANT THROUGHOUT E3 PANELS)

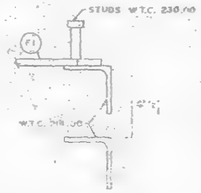
*DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO. E3P SIZE 20' x 59'-0 3/4"







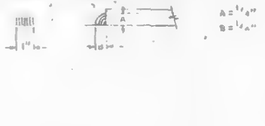


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE BOTTOM CLIP SEE DETAIL "B" BEARING

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T28P	1	C32T28P - 57'-7"	ST 228P
	T31	2	C32T31 - 59'-0 3/4"	ST 231
	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 19'-11"	BT 208C
	T8C	1	24T8D - 19'-11"	BT 208D
	T8E	1	24T8E - 19'-11"	BT 208E
	T1S	1	24T1S - 19'-11"	BT 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 10'-0"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 1/4"	ST 403
	A3	2	3" x 2" x 1/4" x 8'-11 3/4"	ST 403
	A4	1	3" x 2" x 1/4" x 11' 3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-3 5/8"	ST 405
DIAGONAL FLATS	F	6	1" x 4" x 6'-8"	ST 401
GUSSET PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 303
	L	3	9" x .0135" x 16'-4 1/2"	ST 303
ANGLE CLIPS	C1	4	2" x 2" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
CAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3'-0 3/4"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3'-0 3/4"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	5	1" ϕ x 1'-3"	ST 400
CONNECTION PLATES	E1	6	6 1/2" x 1 1/2" x 2'-9"	ST 418
	E2	5	3'-[illegible] x 1/2" x 2'-9"	ST 410
	E3	1	4'-2" x 1/2" x 2'-9"	ST 410
	P3	1	[illegible]	ST 410
	P5	3	[illegible]	ST 400
	PC	1	[illegible]	ST 401
"B" SHEAR ANCHOR	SA2	6	[illegible]	[illegible]
PATCH PLATES	PP1	18	2" x 1/4" x 1'-9"	ST 410
	PP2	18	3" x 1/4" x 0'-9"	ST 410

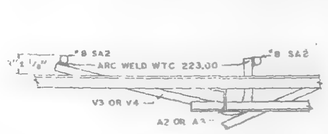
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" ℄ FULL THROAT FILLET.

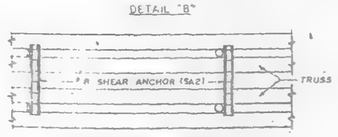


DETAIL "A"

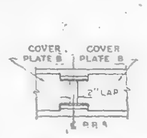
SECTION B-B



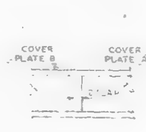
DETAIL "B"



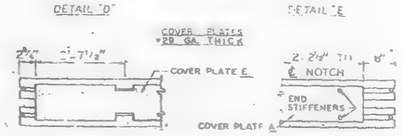
TOP VIEW - DETAIL "B"



DETAIL "D"

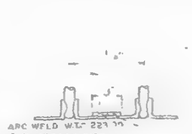


DETAIL "E"



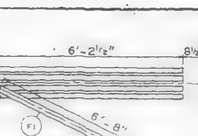
DETAIL "F"

DETAIL "G"



DETAIL "C"

SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	BY
1	8-4-83	AS NOTED	G.D.C.

[illegible]	7-22-68
[illegible]	1-6-69
[illegible]	10-15-68
[illegible]	7-22-68
[illegible]	10-15-68
[illegible]	1-6-69
[illegible] 25 & 28	1-6-69
[illegible] 29 & 30	1-6-69
7-A82-19	1-6-69

FLOOR PANEL DETAILS

[illegible]

BLDG. B FLOORS 78 (NORTH)

PANEL E3P [illegible] = 59'-0 3/4"

BLDG. B FLOORS 78 (WEST)

[illegible] STEEL COMPANY

FABRICATED AT MADISON, ILL. WORKS		DESIGN DRAWING NO. 7 A83 49	PLATE
APPROVED FOR FABRICATION FOR PLANT A.	DATE 8/11/69	DRAWN BY GDC DATE APRIL 2, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE, APRIL 2, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible] CARL WEST		FABRICATION CONT. NO W.T.C. 321	SHEET NO FP E3P

LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 204 OR CD 231.

OVERALL LENGTH = 59'-0¾"

DAMPING SADDLE

59'-0¾"

58'-7"

℄ HOLES

3"

CORE END

CL1 = 9'-6⅛"

COLUMN END

TRUSS NO. C32T32 59'-0¾" LONG

TRUSS NO. C32T31 59'-0¾" LONG

TRUSS NO. C32T28P (8A) 57-7" LONG

24TBC 24TBD 24TBE 24TBF

℄ HOLES -2½" 1'-6⅛" OFFSET

"M" (℄ HOLES) = 57'-1¾"

57'-7"

L.E. = 1'-5¾"*

* DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO. ER3P SIZE 20' x 59'-0¾"

℄ EXT. COL. REF. LINE

MIN. LENGTH OF ⅝" WELD = 4" W.T.C. 223.00

8'-8"

3'-4"

END DIAGONAL TRUSS BRACES BRACED BEAR LECK BYP W.T.C. 213.00

STUDS W.T.C. 230.00

CONNECTION LOCATION F.H. DIAGONAL FLATS C.H. OF TRUSS

REQUIRED MATERIAL				
MATERIAL	MK.	QTY.	SIZE	LENGTH
FLOOR TRUSS	T28P	1	C32T28P - 57'-7"	228P
	T31	2	C32T31	231
	T32	2	C32T32 - 59'-0¾"	232
	T33	1	C32T33	233
	T3C		C	3C
	T4D		L	4D
	T5E		E	5E
	T2	4		2
	T3	4		3
	T4	4		4
	A			
	B			
	C			ST 303
ANGLE CLIP	C1	4	2"x3½"x¼"x 10'-8"	ST 400
	C2	4	2"x3½"x¼"x 8"	ST 400
DAMPING SADDLE	DS1	1	12"x 3½" x 5'-0"	ST 248
	DS2-3	2	12"x 3½" x 4'-0"	ST 248
CONNECTION BAR	CB1	1	8" x 3" x	ST 400
	CB2	1	8" x 3" x	ST 400
CONNECTION PLATES	P1*	6	6"x9"x¼"x 2'-9"	ST 516
	P1			- 0
	P2			- 0
	P3			- 0
	P5			400
	P6			- 0
BEARING PLATE	BA2			- 0
PATCH PLATES	PP1	8	3"x 3" x	ST 400
	PP2	8	3"x 3" x	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E70XX CLASS EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" OR ⅛" FULL THROAT FILLET.

A = 7/16"
B = 3/4"

PP1 PP2

3"x 2'-1½" MK. A 3"x 2'-1½" MK. A1 3"x 2'-1½" MK. A1 3"x 2'-1½" MK. A1 3"x 2'-1½" MK. A1

24TBC 24TBD 24TBE 24TBF

3'-1" 4'-10" 5'-8" 5'-8" 5'-8" 5'-8"

14'-4" (B) 15'-2" SEE DETAIL "D" (B1) 15'-2" SEE DETAIL "E" (A) 14'-11½"

SEE DETAIL "F" 2'-8¼" 6'-8" 13'-4" 6'-2¼"

10⅜" OR 3¾" LOCATION OF HOLES 2½"

TOP PLATES AT ALTERNATE PANEL POINTS

SEE PLATES NOT SHOWN ON TOP CHORD

LOCATION OF HOLES

15"-3¾" TRUSSES ONLY

8'-4" 13'-4"

BOTTOM CHORD PATCH PLATES 15"-2¾" TRUSSES ONLY

TRUSS

1"x ¼" x 2" FILLET WELD 223.00

3"

2"

2¾"

3"x 2"x¼" ∠

DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

ARC WELD W.T.C. 223.00 TOP PLATE

3"x 2"x¼" PATCH PLATE MK. PP1

12" TRUSS

DETAIL A

SECTION B-B

¾" ø SHEAR ANCHOR (SA2)

TRUSS

TOP VIEW DETAIL B

COVER PLATE B 2" LAP COVER PLATE A

DETAIL E

2" LAP

SECTION C-C

COVER PLATES #22 GA. THICK

COVER PLATE B

2½" 7½"

DETAIL F

FIELD PUNCH COVER PLATES OVER END STIFFENERS WITH ø23 ø

NOTCH

2½" 4"

TOP PLATE

DETAIL G

ARC WELD W.T.C. 223.00 ¼"x3" EACH SIDE

DETAIL C

BATCH PLATE

SECTION D-D

△	8-4-69	AS NOTED		GDC BY
NO.	DATE	REVISION		
		TYPE 10		1-22-68
		7-AB3-50		1-6-69
				10 15 68
				7-22-68
		PLATE 4		10 15 68
		SA 124		1-6-69
		ITEM 29 & 30		1-6-69
		ITEM 33 & 34		1-6-69
		7-AB2-19		1-6-69

78 (NORTH)

ER3P - 59'-0¾"

BLDG. B FLOORS 78 (WEST)

FABRICATED AT MADISON, ILL. NO. 50		DRAWING NO.	
APPROVED FOR FABRICATION BY [illegible] FOR PONTA	DATE	DRAWN BY	PLATE
		DATE APRIL 2, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHIMA DATE APRIL 2, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP-ER3P

LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202, CD 204 OR CD 231

OVERALL LENGTH = 59'-0 3/4"

"M" + 5 1/4" = 59'-0 3/4"

"M" (C/C HOLES) = 58'-7 1/4"

CL4 = 49'-6 1/8"

CL3 = 36'-2 1/2"

CL2 = 22'-10 1/8"

CL1 = 9'-1 6 1/2"

CORE END

COLUMN END

TRUSS NO. C32T33 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T28P 57'-7" LONG

24T8C

24T8D

24T8E

24T5

DUS-3

DUS-5

DAMPING SADDLE

1'-6 1/2" OFFSET

"M" (C/C HOLES) = 57'-1 1/4"

57'-7"

"DIMENSION" L.E. VARIES ACCORDING TO LENGTH OF C32T28.

PANEL NO. ER3P SIZE 20' x 59'-0 3/4"

PP1

PP2

SEE DETAIL "J"

DAMPING SADDLE

3"x 2"x 1/4" MK. A2

3 1/2"x 2 1/2"x 1/4" MK. A8

3"x 2"x 1/4" MK. A1

3 1/2"x 2 1/2"x 1/4" MK. A1

3"x 2"x 1/4" MK. A1

3"x 2"x 1/4" MK. S1

24T8C

24T8D

24T8E

24T5

COVER PLATE PLACEMENT

SEE DETAIL "D"

SEE DETAIL "E"

SEE DETAIL "G"

LOCATION OF HOLES

PATCH PLATES ATTACHED ITEN PLACEMENT OF COVER PLATES NOT SHOWN SEE DETAIL

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)

SEE DETAIL "C"

LOCATION OF HOLE

C EXT. COL. REF. LINE

MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00

ARC WELD MIN 6" LONG W.T.C. 230.00

TYP. EACH FLAT

3'-4"

TYPICAL PLAN OF DIAGONAL OVER DECK BY W.T.C. 223.00

STUDS W.T.C. 230.00

W.T.C. 230.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS & 4 1/2" ABOVE BOTTOM CHORD CLIPS FOR TRUSS & BEARING

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS	SIZE	DWG.
FLOOR TRUSSES	T28P	1	C32T28P - 57'-7"	ST 228P
	T31	2	C32T31 - 59'-0 3/4"	ST 231
	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
	T6C	1	24'-C 19'-11"	ST - 8C
	T8D	1	24'-D 19'-11"	ST - 8D
	T5E	1	24'-E 19'-11"	ST - 8E
	T1E	1	[illegible] 19'-11"	ST [illegible]
4" x 2"x 1/4" ANGLE	A1	4	[illegible] 19'-11"	ST 403
	A2	4	[illegible]	ST 403
	A3	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	ST 403
	A8	[illegible]	[illegible]	ST 403
[illegible]	A	[illegible]	[illegible]	[illegible]
	A	1	DIA3 [illegible]	ST 103
	B	1	DIA3 15'-2"	ST 103
	E	1	DIA5 [illegible]	ST 103
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	C1	2	[illegible]	ST 400
[illegible]	C2	4	[illegible]	ST 400
DAMPING SADDLE	DUS-3	2	3/8" x 3'-0" x 3 3/4" x 3'-0"	ST 298
	DUS-5	2	1/2" x 3'-0" x 3 3/4" x 3'-0"	ST 298
CONNECTION BAR	CB1	1	[illegible]	ST 400
	CB2	1	[illegible]	ST 400
	CB3	8	[illegible]	ST 400
CONNECTION PLATES	F1	1	[illegible]	ST 400
	F2	1	[illegible]	ST 400
	F3	1	[illegible]	ST 400
	F5	1	[illegible]	ST 400
	PC	1	[illegible]	ST 400
[illegible] SHEAR [illegible]	SA2	[illegible]	[illegible]	ST 400
PATCH PLATES	PP1	18	2'-6" x 4'-0" x 0'-9"	ST 400
	PP2	10	3'-6" x 6'-0" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" FULL THROAT FILLET.

-62 x 2" x 2'-9"

TOP VIEW - DETAIL "A"

ARC WELD THROUGH COVER PLATE

TOP CHORD PATCH PLATE MK. PP1

32" TRUSS

COVER PLATE

DETAIL "A"

2" x 1/4" x 0'-9" PATCH PLATE PP1

ARC WELD W.T.C. 223.00

COVER PLATE

ARC WELD W.T.C. 223.00

7 1/4"

1/4" x 1/2" FILLET W.T.C. 223.00

SECTION B-B

DETAIL "B"

3"x 2"x 1/4" SA2

ARC WELD W.T.C. 223.00

2" CRVD

DETAIL "C"

COVER PLATE B

COVER PLATE E

2" LAP

DETAIL "D"

COVER PLATE B

COVER PLATE A

2" LAP

DETAIL "E"

TOP VIEW - DETAIL "B"

F.B SHEAR ANCHOR (SA2)

TRUSS

DETAIL "F"

2 1/4"

7 1/2"

COVER PLATES 29 GA. THICK

COVER PLATE E

DETAIL "G"

NOTCH

END STIFFENERS

COVER PLATE A

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

TRUSS

2" FILLET WELD 223.00

3"x 2"x 1/4" A

2"

2 3/4"

SECTION A-A

END SUPPORT ANGLE

ARC WELD W.T.C. 223.00

1/4" x 3" EACH SIDE

DETAIL "G"

ARC WELD W.T.C. 223.00

3"x 3"x 3/8" PATCH PLATE MK PP2

SECTION C-C

REVISION		
7 Ans. 10		7-22-68
7-AB3-50		1-6-69
8		10-15-68
7-AB2-42		7-22-68
7-AB2-42		10-15-68
7-AB4-24		1-6-69
7 Ans. 29 & 30		1-6-69
7-AB3, 33 & 34		1-6-69
7-AB2-15		1-6-69

NEW YORK AUTHORITY

CONSTRUCTIONS 78 (NORTH)

PANEL ER3P - 0" x 59'-0 3/4"

BLDG. B FLOORS 78 (WEST)

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A. DATE

APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR DATE

DETAILED BY [illegible]

DRAWING NO. 7 AB3.50

DRAWN BY [illegible] DATE APRIL 2, 1969

CHECKED BY T.N. CHURA DATE APRIL 2, 1969

FABRICATORS CONT. NO. W.T.C. 221

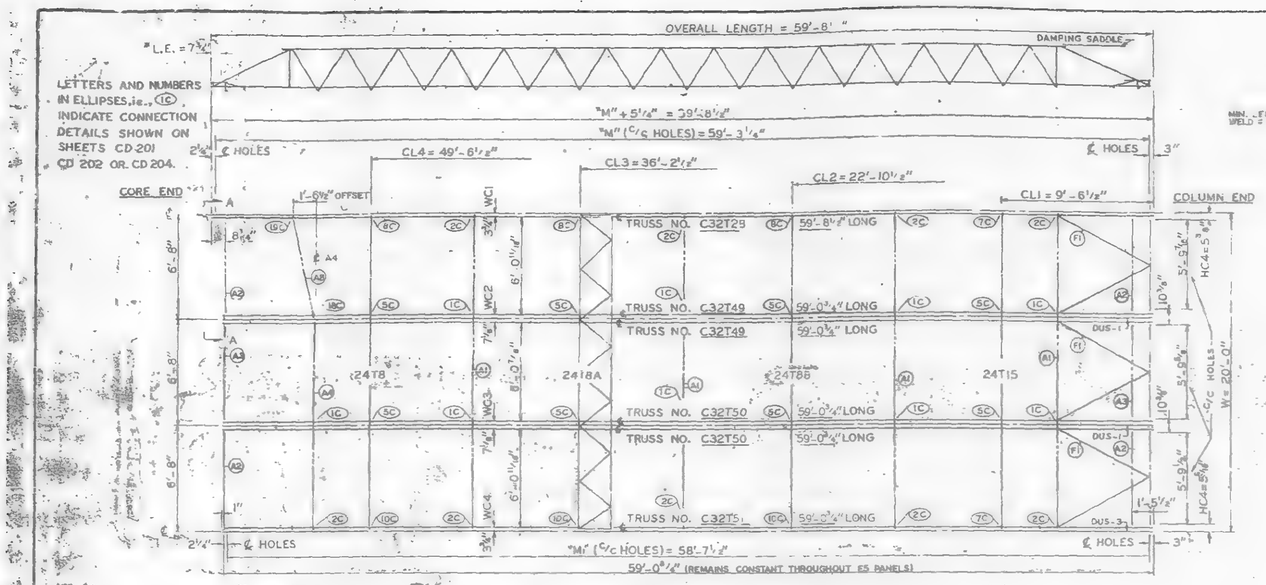
PLATE

IN CHARGE

PROD. DEV.

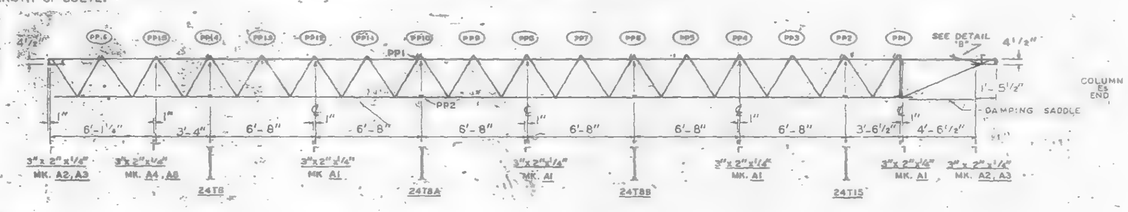
SHEET NO. FP-ER3P

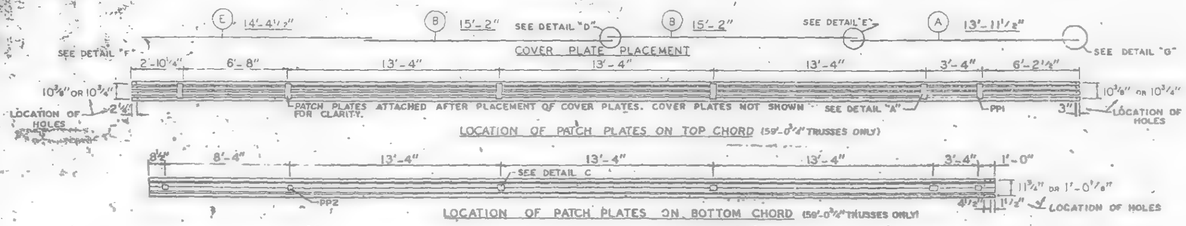
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 & CD 202 OR CD 204.

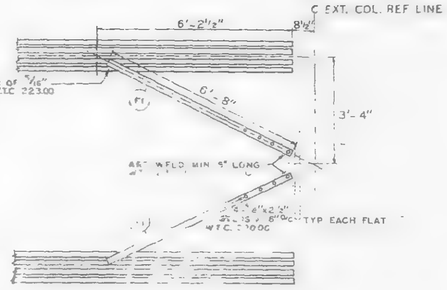


PANEL NO. ES8 SIZE 20' x 59'-8½"

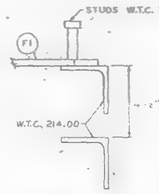
"DIMENSION "L.E." VARIES ACCORDING TO LENGTH OF C32T2.







TYPICAL PLAN OF TOP CHORD AT COLUMN END DIAGONAL TRUSS BRACED OVER DECK BY W.T.C. 223.00

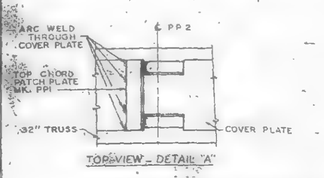


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-1/8" ABOVE COLUMN "CLIPS FOR TRUSS" BEARING.

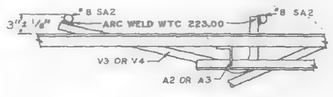
REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T28	1	C32T28 - 59'-8½"	ST 2028
	T49	2	C32T49 - 59'-0¾"	ST 249
	T50	2	C32T50 - 59'-0¾"	ST 250
	T5	1	C32T51 - 59'-0¾"	ST 251
BRIDGING TRUSSES	T8	1	24T8 - 18'-11"	BT 248
	T8A	1	24T8A - 18'-11"	BT 248A
	T8B	1	24T8B - 18'-11"	BT 248B
	T15	1	24T15 - 18'-11"	BT 2415
3"x 2"x1/4" ANGLE	A1	4	3" x 2" x 1'-4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1'-4" x 5'-11½"	ST 403
	A3	2	3" x 2" x 1'-4" x 5'-11½"	ST 403
	A4	1	3" x 2" x 1'-4" x 3'-3"	ST 403
	A8	1	3" x 2" x 1'-4" x 6'-3½"	ST 403
DIAGONAL FLATS	F1	6	1'-0" x 7" x 1'-8"	ST 302
COVER PLATES	A	3	9" x 0'-13⅝" x 13'-11½"	ST 303
	B	6	9" x 0'-13⅝" x 15'-2"	ST 303
	I	3	9" x 0'-13⅝" x 14'-4½"	ST 303
ANGLE CLIP	C1	20	2½" x 2½" x 1¼" x 0'-8"	ST 400
	C2	4	2½" x 1½" x 1¼" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3½" x 3½" x 3/16" x 31'-0⅝"	ST 298
	DUS-3	1	3½" x 3½" x 3/16" x 31'-0⅝"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	1⅝" ϕ x 1'-3"	ST 400
	CB3	6	1⅝" ϕ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3½" x 3/16" x 0'-½"	ST 400
	P2	1	4½" x .44" x 1'-4"	ST 400
	P3	1	4½" x .39" x 1'-0"	ST 400
	P5	3	4½" x 1/4" x 1'-8"	ST 400
	P6	1	4½" x .34" x 6'-4"	ST 401
⅞" SHEAR ANCHOR	SA2	6	⅞" ϕ STUD x 0'-3"	ST 400
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. IRON RODS IN THE E-70 SERIES OR EQUAL.

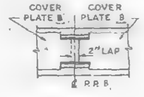
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



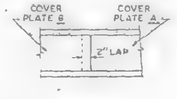
TOP VIEW - DETAIL "A"



DETAIL "B"

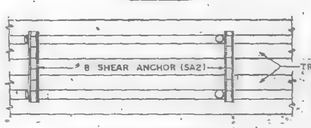


DETAIL "D"

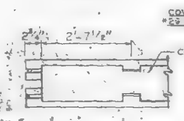


DETAIL "E"

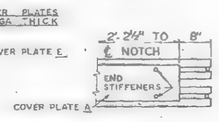
DETAIL "A" SECTION B-B



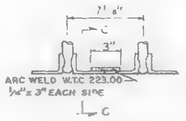
TOP VIEW - DETAIL "B"



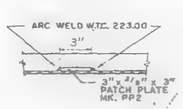
DETAIL "F"



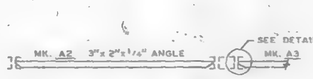
DETAIL "G"



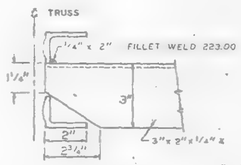
DETAIL "C"



SECTION C-C



SECTION A-A
END SUPPORT ANGLE



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

REF. DRWGS.

7-A82-3 & 10	7-22-68
7-A83-73	11-25-68
7-A84-3	10-15-68
7-A84-15 & 16	7-22-68
7-A84-42	10-15-68
SA-124	10-11-68
7-A81-3	7-22-68
7-A81-44,45 & 46	11-25-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 83 (NORTH)

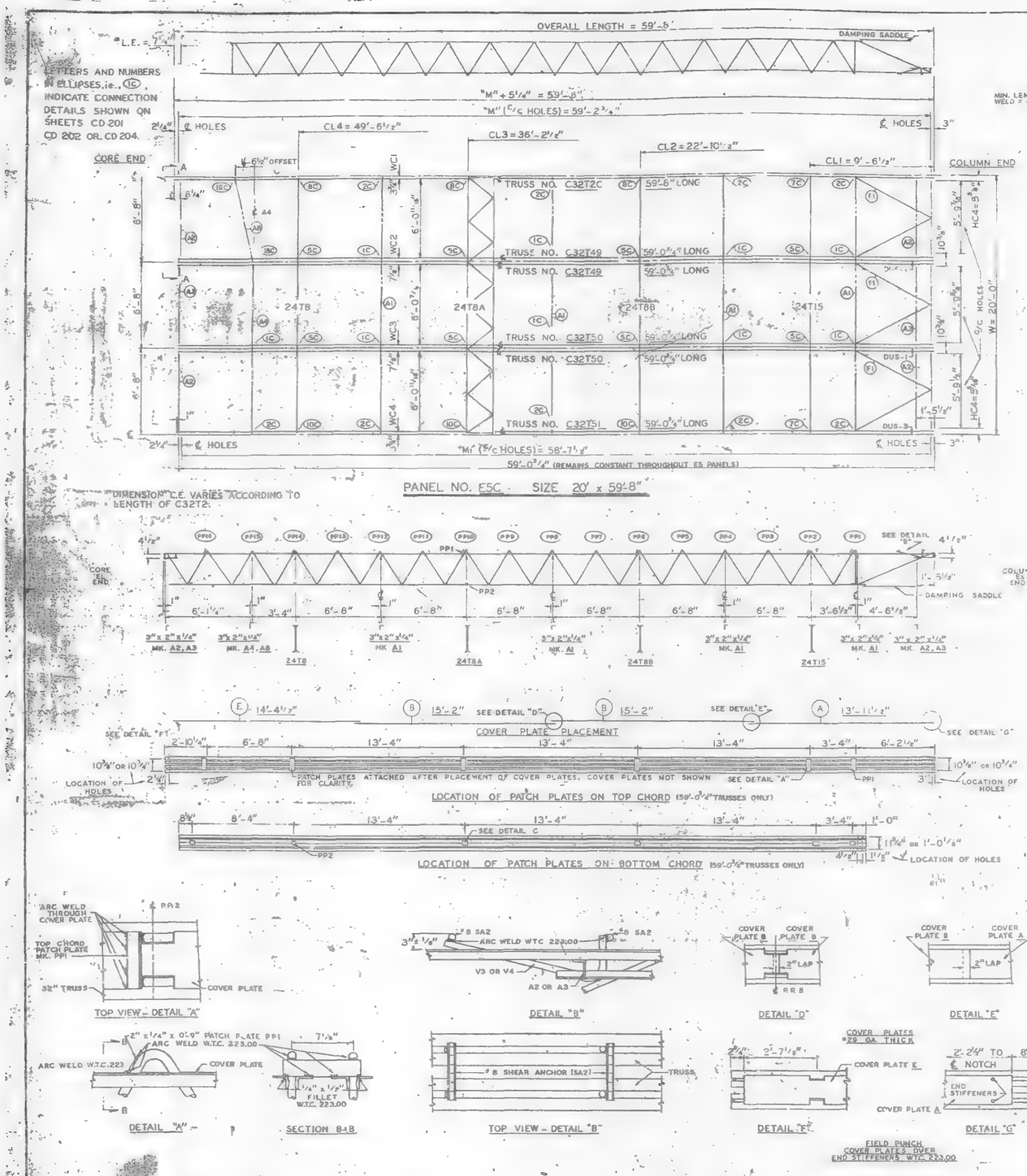
PANEL ES8 - 20' x 59'-8½"

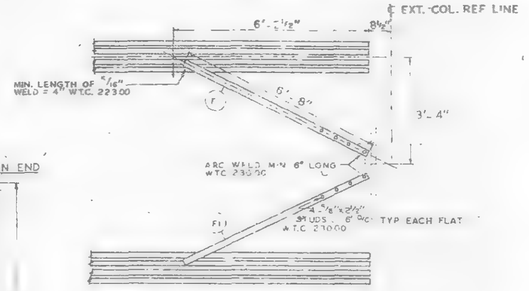
BLDG. B FLOORS 83 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

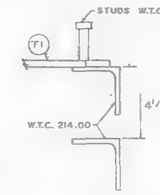
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-73	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 7/31/69	DRAWN BY: [illegible] DATE JAN. 15, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.NICHURA DATE JAN. 15, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP ES8

ARCHITECTURAL CO.





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

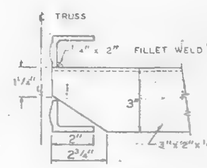


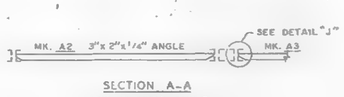
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-6" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

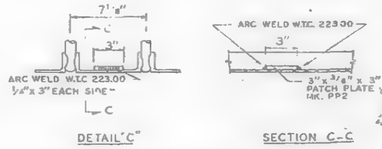
REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PC	SIZE	DRWG.
FLOOR TRUSSES	T2C	1	C32T2C - 59'-8"	ST 202C
	T49	2	C32T49 - [illegible]	ST 249
	T50	2	C32T50 - [illegible]	ST 250
	T51	1	C32T51 - 59'-0 3/4"	ST 251
BRIDGING TRUSSES	TP	1	24TP - 19'-11"	BT 218
	T8A	1	24T8A - 19'-11"	BT 218A
	T8B	1	24T8B - 19'-11"	BT 218B
	T15	1	24T15 - 19'-11"	BT 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 4" x 5'-[illegible]"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-[illegible]"	ST 403
	A4	1	3" x 2" x 4" x 3'-[illegible]"	ST 403
	A8	1	3" x 2" x 4" x 6'-[illegible]"	ST 405
DIAGONAL FLATS	[illegible]	[illegible]	[illegible]	[illegible]
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	6	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 4'-[illegible]"	ST 303
ANGLE CLIP	C1	20	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	1 3/8" ϕ x 1'-3"	ST 400
	CB3	6	1 3/8" ϕ x 1'-5"	ST 400
CONNECTION PLATES	[illegible]	5	3/8" x 3 1/2" x [illegible]"	ST 400
	PP2	1	4 1/2" x 3'-3" x 1'-6"	ST 400
	PP3	1	4 1/2" x 3'-3" x 1'-0"	ST 400
	PP5	3	4 1/2" x 1'-4 1/2" x 1'-6"	ST 400
	PP6	1	4 1/2" x [illegible]" x 0'-3"	ST 401
#8 SHEAR ANCHOR	SA2	6	#8 REBAR x 0'-4"	ST 400
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.







NO.	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & 10	7-12-68
7-AB3-73	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-44,45 & 46	11-25-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

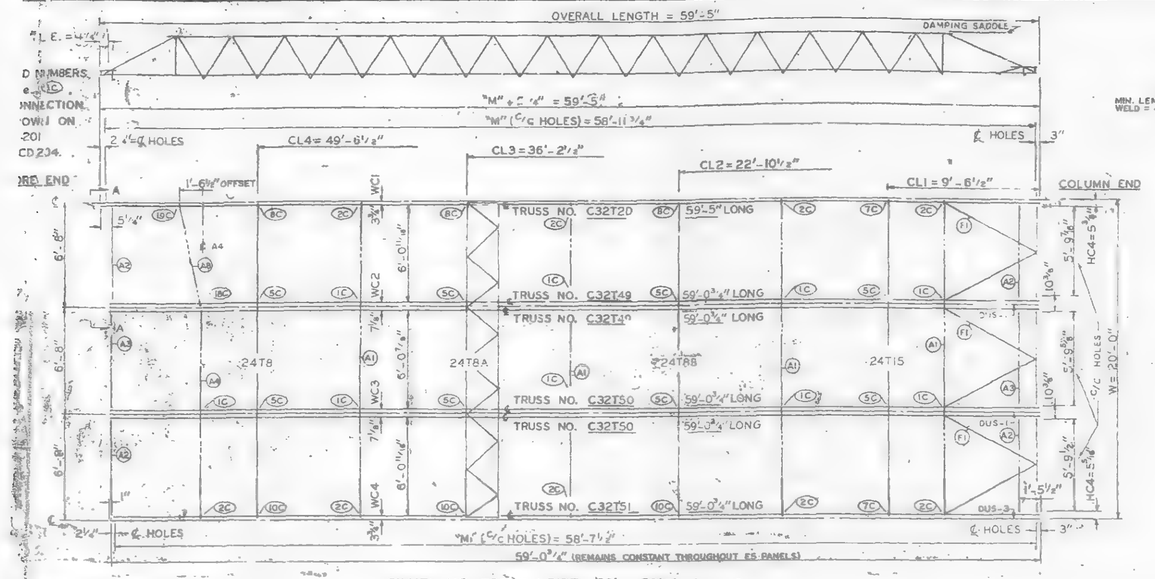
BLDG. A FLOORS 49 (SOUTH)

PANEL E5C - 20' x 59'-8"

BLDG. B FLOORS 49 (EAST)

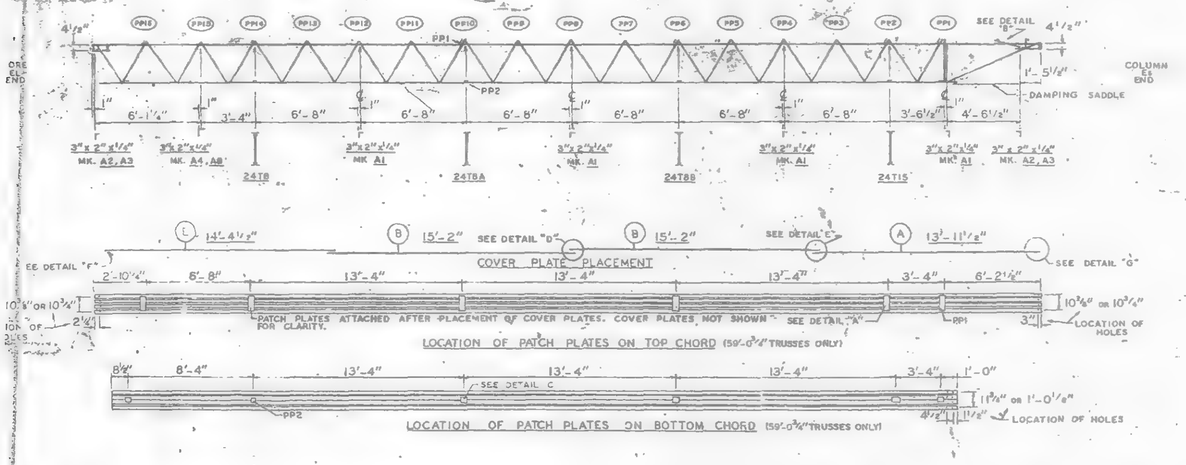
FABRICATION BY LACLEDE STEEL COMPANY

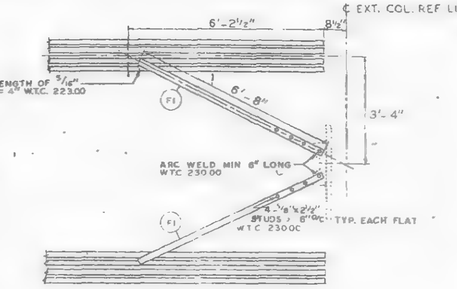
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-73	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 7-24-68	DRAWN BY A.S.C. DATE JAN. 15, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JAN. 15, 1969	IN CHARGE OF PROD. DEV.
DETAILED [illegible]		FABRICATION CONT. NO. W.T.C. - 221	SHEET NO. FP-E5C



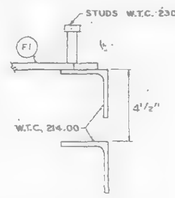
PANEL NO. E5D SIZE 20' x 59'-5"

DIMENSION "L.E." VARIES ACCORDING TO LENGTH OF C32T2:





TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

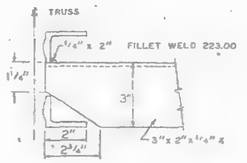


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T2D	1	C32T2D - 59'-5"	ST 2026
	T49	2	C32T49 - 59'-0 3/4"	ST 249
	T50	2	C32T50 - 59'-0 3/4"	ST 250
	T5	1	C32T51 - 59'-0 3/4"	ST 251
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	BT 208
	T8A	1	24T8A - 19'-11"	BT 208A
	T8B	1	24T8B - 19'-11"	BT 208B
	T1S	1	24T1S - 19'-11"	BT 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A4	2	3 1/2" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A8	2	3 1/2" x 2" x 1/4" x 4'-6 1/2"	ST 403
DIAGONAL FLATS	D	3	6" x 5" x 1/4" x 6'-2"	ST 363
	D1	4	6" x 5" x 1/4" x 6'-2"	ST 363
COVER PLATES	A	3	6" x 5" x 1/4" x 6'-2"	ST 363
	A1	4	6" x 5" x 1/4" x 6'-2"	ST 363
	B	1	6" x 4" x 1/4" x 6'-2"	ST 363
ANGLE CLIPS	C1	10	12" x 3" x 1/4" x 0'-8"	ST 400
	C2	4	12" x 3" x 1/4" x 8"	ST 400
DAMPING SADDLE	DS-1	2	3" x 3" x 1/4" x 6'-2"	ST 223
	DS-3	1	3" x 3" x 1/4" x 5'-11 3/4"	ST 223
CONNECTION PLATES	C3	1	1" x 8" x 8"	ST 400
	C32	5	5/16" x 8" x 1'-3"	ST 400
	C52	4	1/2" x 8" x 1'-3"	ST 400
	P1	5	3" x 1/4" x 8"	ST 400
	P1'	1	4" x 3" x 1/4" x 8"	ST 400
	P2	1	4" x 3" x 1/4" x 1'-6"	ST 400
	P3	3	4" x 3" x 1/4" x 6"	ST 400
	P1'	1	4" x 3" x 1/4" x 1'-0"	ST 401
3/8" SHEAR STUD	SA2	6	3/8" HEADED x 3 1/4"	ST 404
PATCH PLATES	PP1	18	2" x 1/4" x 1'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. 10 OR EN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/2" x 1" FULL THROAT FILLET.

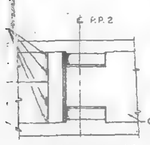


DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

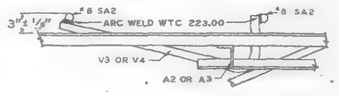
NO.	DATE	REVISION	BY

REF. DRWGS.

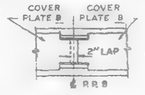
7-A82-3 & 10	7-22-68
7-A83-73	11-25-68
7-A84-3	10-15-68
7-A84-15 & 16	7-22-68
7-A84-42	10-15-68
SA-124	10-11-68
7-A81-3	7-22-68
7-A81-44,45 & 46	11-25-68



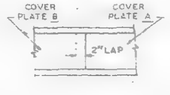
TOP VIEW - DETAIL "A"



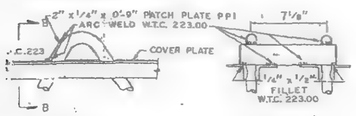
DETAIL "B"



DETAIL "D"

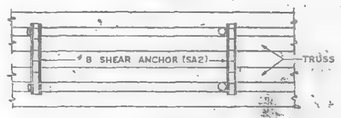


DETAIL "E"

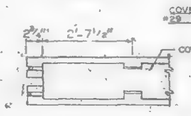


DETAIL "A"

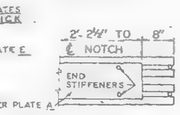
SECTION B-B



TOP VIEW - DETAIL "B"



DETAIL "F"



DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

SECTION A-A
END SUPPORT ANGLE

DETAIL "C"

SECTION C-C

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 81 & 82 (NORTH)

PANEL E5D - 20' x 59'-5"

BLDG. B FLOORS 81 & 82 (WEST)

FABRICATION BY: LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY: W. Inc FOR PONYA DATE

APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE

DETAILED BY: A. CARL WEBER

DESIGN DRAWING NO. 7-A83 73

PLATE

DRAWN BY: G.C.C. DATE: JAN. 15, 1969

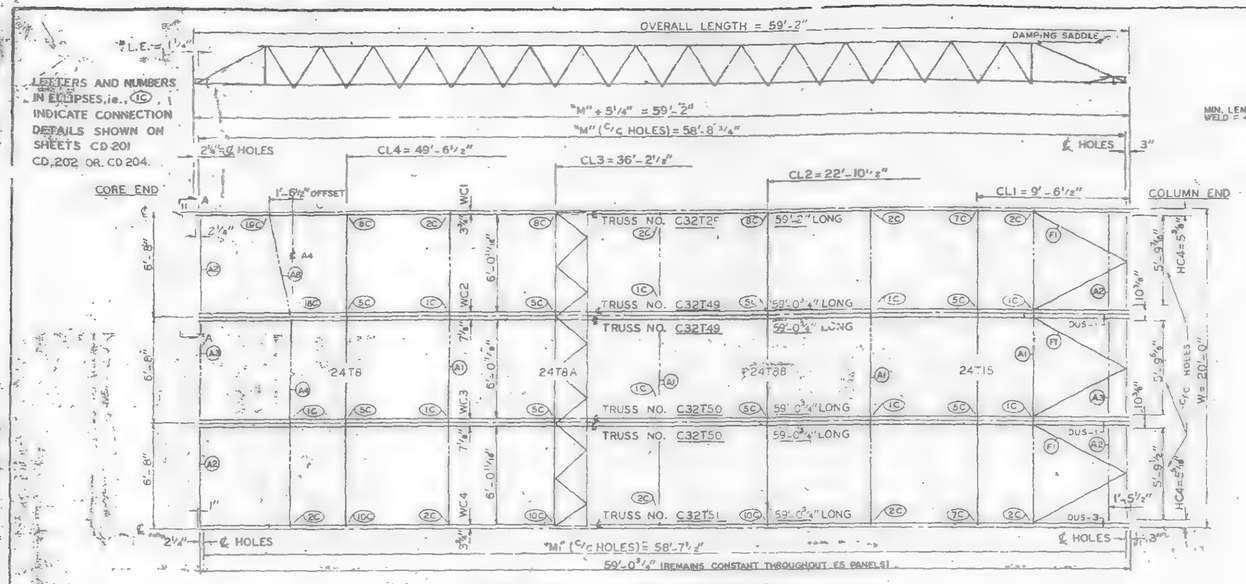
CHECKED BY: T.N. CHUBA DATE JAN. 15, 1969

IN CHARGE OF PROD. DEV.

FABRICATION CONT. NO. W.T.C. - 221 -

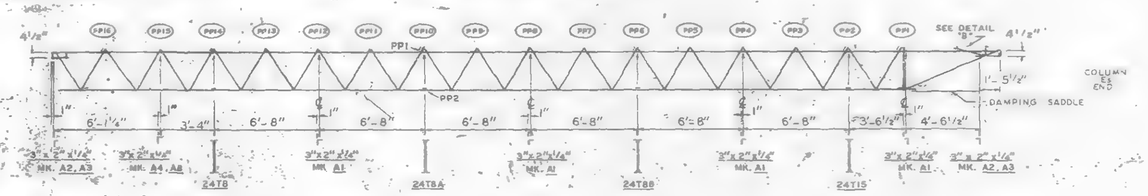
SHEET NO. FP E5D

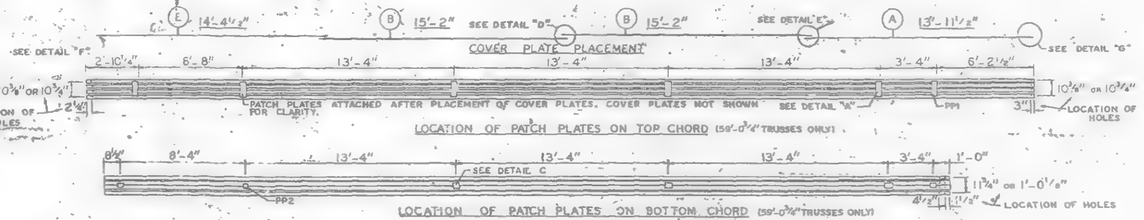
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.

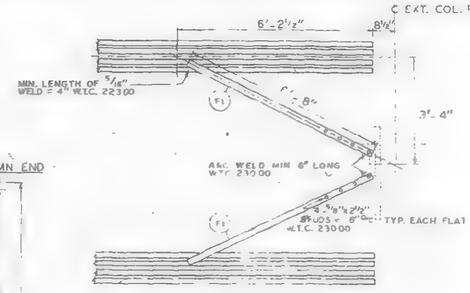


"DIMENSION" L.E. VARIES ACCORDING TO LENGTH OF C32T2.

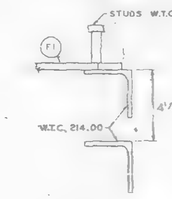
PANEL NO. ESF SIZE 20' x 59'-2"







TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES FLARED OVER DECK BY W.T.C. 223.00

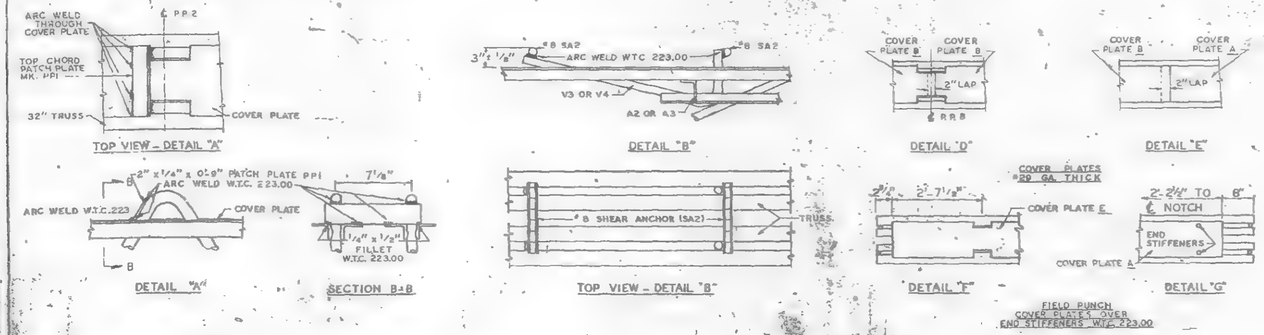


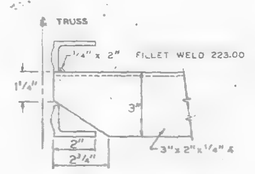
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

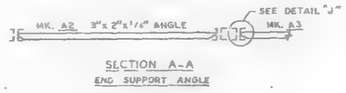
REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T2F	1	C32T2F - 59'-2"	ST 202F
	T49	2	C32T49 - 59'-0 3/4"	ST 249
	T50	2	C32T50 - 59'-0 3/4"	ST 250
	T51	1	C32T51 - 59'-0 3/4"	ST 25
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	BT 248
	T8A	1	24T8A - 19'-11"	BT 248A
	T8B	1	24T8B - 19'-11"	BT 248B
	T15	1	24T15 - 19'-11"	BT 245
3" x 2" x 1/4" ANGLE	A	4	3" x 2" x 1'-4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1'-4" x 5'-11 7/8"	ST 403
	A3	2	3" x 2" x 1'-4" x 5'-11 7/8"	ST 403
	A4	1	3" x 2" x 1'-4" x 13'-3"	ST 403
	A8	1	3" x 2" x 1'-4" x 8'-4 3/4"	ST 403
DIAGONAL FLATS	F	6	8" x 8" x 1'-4"	ST 402
COVER PLATES	A	3	8" x 0'-13 5/8" x 13'-11 1/2"	ST 303
	B	6	8" x 0'-13 5/8" x 15'-2"	ST 303
	E	3	8" x 0'-13 5/8" x 14'-8 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 1 1/2" x 1 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1 1/4" x 8"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3" x 3" x 5'-8 3/4"	ST 298
	DUS-3	1	3/16" x 3" x 3" x 3'-8 3/4"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	13/16" ϕ x 1'-3"	ST 400
	CB3	6	13/16" ϕ x 1'-8"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3 3/8" x 1'-1"	ST 400
	P2	1	4'-2" x 3 3/4" x 0'-9"	ST 400
	P3	1	4'-2" x 3 3/4" x 1'-0"	ST 400
	P5	3	4'-2" x 1'-1 3/4" x 1'-8"	ST 400
	P6	1	4'-2" x 3 3/4" x 6'-4"	ST 401
3/8 SHEAR ANCHOR	SA2	6	3/8" ϕ HEDAR x 0'-4"	ST 411
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-8"	ST 400
	PP2	18	3" x 3 1/8" x 0'-5"	ST 400

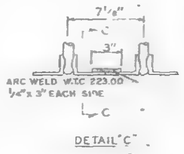
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

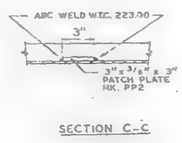
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.











NO.	DATE	REVISION	BY

REF. DRWGS.

7-A82-3 & 10	7-22-68
7-A83-73	11-25-68
7-A84-3	10-15-68
7-A84-15 & 16	7-22-68
7-A84-42	10-15-68
SA-124	10-11-68
7-A81-3	7-22-68
7-A81-44,45 & 46	11-25-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 47 & 48 (SOUTH)

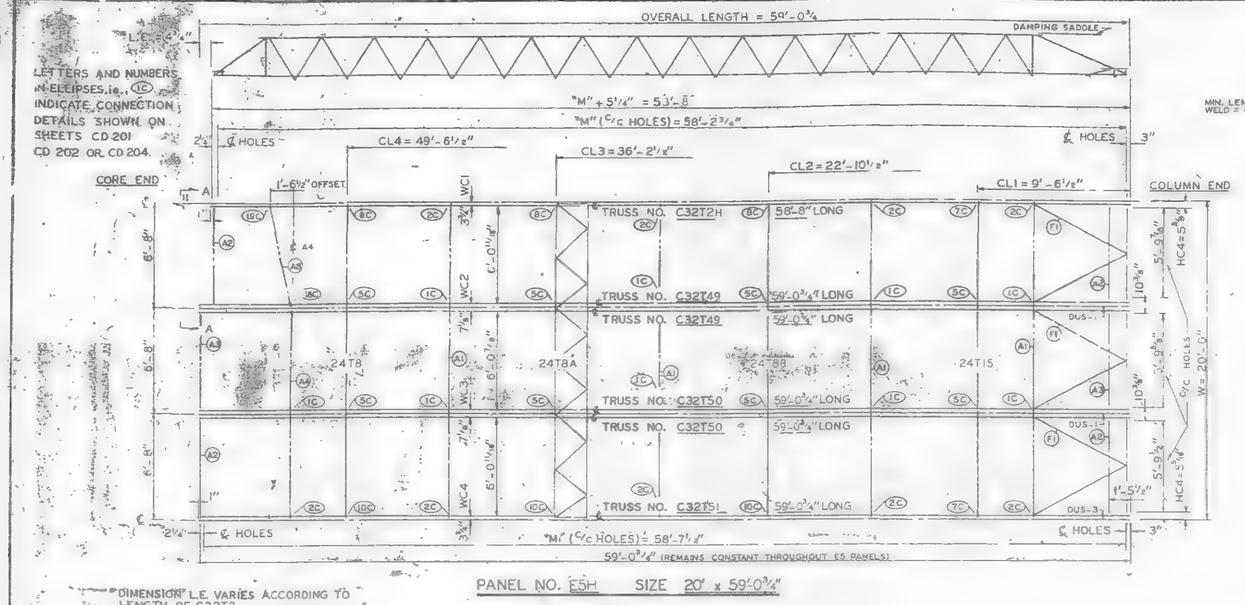
PANEL ESF - 20' x 59'-2"

BLDG. B FLOORS 47 & 48 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

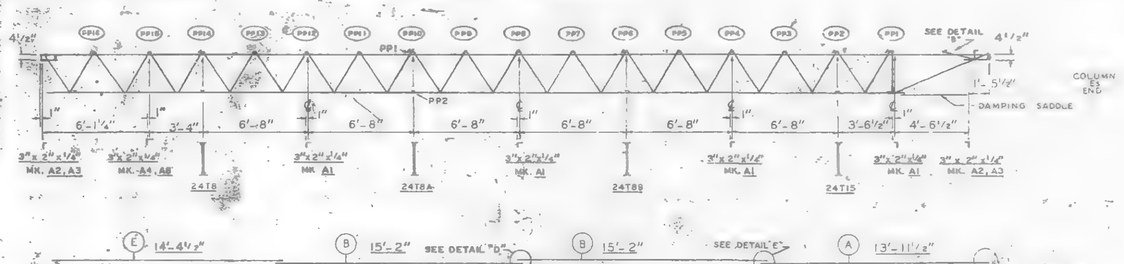
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7-A83.73	PLATE
APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.A.	DATE 7/11/69	DRAWN BY: gdc DATE JAN. 15, 1969
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M.CHURA DATE JAN. 15, 1969 — IN CHARGE OF PROD. DEV.
DETAILED BY: [illegible]	FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP ESF

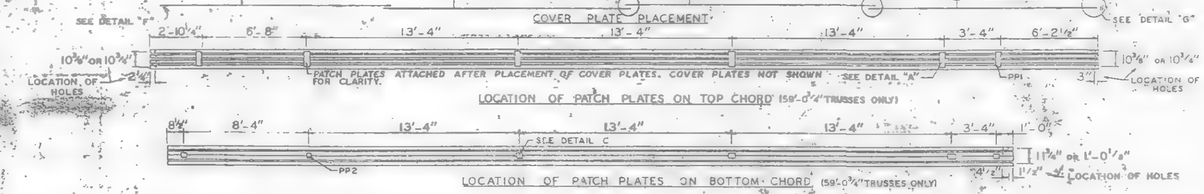
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.

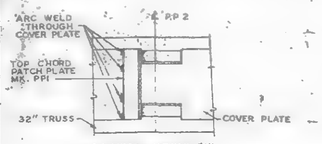


PANEL NO. E5H SIZE 20' x 59'-0 3/4"

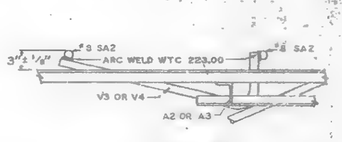
"L.E." DIMENSION VARIES ACCORDING TO LENGTH OF C32T2.



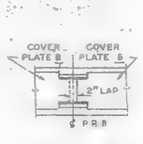




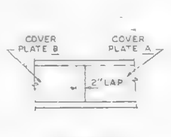
TOP VIEW - DETAIL "A"



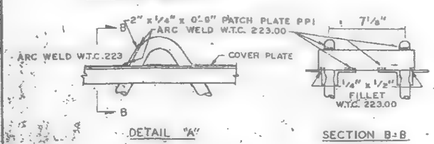
DETAIL "B"



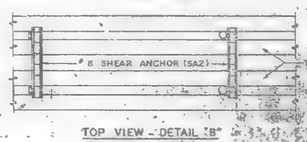
DETAIL "D"



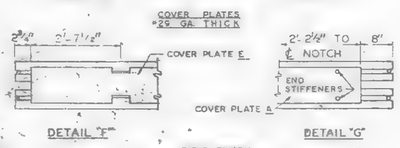
DETAIL "E"



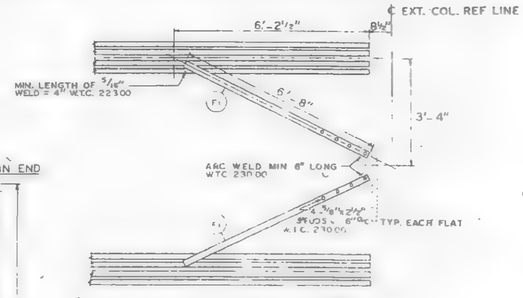
DETAIL "A" SECTION B-B



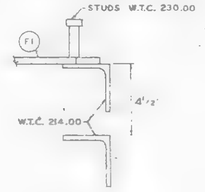
TOP VIEW - DETAIL "B"



DETAIL "E" DETAIL "G"



TYPICAL PLAN OF TOP CHORD DIAGONAL FILL DIAGONAL FLAT BARS FOR OVER DECK BY W.T.C. 223.00

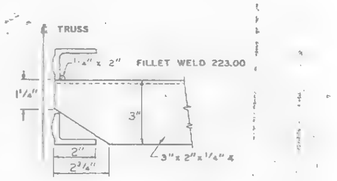


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

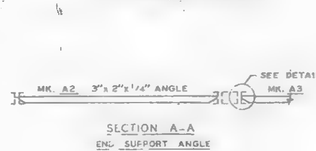
REQUIRED MATERIAL PER PANEL				REF
MATERIAL	MK	FCS	SIZE	DRWG
FLOOR TRUSSES	T2H	1	C32T2H - 58'-8"	ST 202H
	T49	2	C32T49 - 59'-0 3/4"	ST 249
	T50	2	C32T50 - 59'-0 3/4"	ST 250
	T5	1	C32T51 - 59'-0 3/4"	ST 251
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-8 1/4"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"	ST 403
	A4	1	3" x 2" x 1/4" x 1'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-3 3/4"	ST 403
DIAGONAL FLAT BAR	A	2	6" x .0135" x 13'-11 1/2"	ST 303
OVER DECK	B	2	6" x .0135" x 15'-2"	ST 303
	C	1	6" x .0135" x 16'-4 1/2"	ST 303
ANGLE CLIPS	C1	20	2 1/2" x 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3 1/2" x 3'-11" x 3'-0 1/2"	ST 298
	DUS-3	1	3/16" x 3 1/2" x 3'-11" x 3'-0 1/2"	ST 298
CONNECTION BAR	C81	12	1" Ø x 1'-3"	ST 400
	C82	6	1" Ø x 1'-3"	ST 400
	C83	6	1 1/8" Ø x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3/16" x 3 1/2" x 1'-1 1/2"	ST 400
	P2	1	4'-2" x 1'-3 1/2" x 1'-0"	ST 400
	P3	1	4'-2" x 1'-3 1/2" x 1'-0"	ST 400
	P5	3	4'-2" x 1'-3 1/2" x 1'-6"	ST 400
	P7	1	4'-2" x 1'-3 1/2" x 1'-9"	ST 401
3/8 SHEAR ANCHOR	SA2	6	3/8 Ø HEAD x 0'-4"	ST 414
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/16" x 1'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. 80 CEN RODS IN THE E-70 SERIES OR EQUAL.

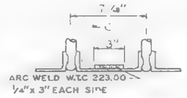
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



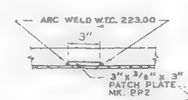
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT



SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

NO	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & 10	7-22-68
7-AB3-73	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-44,45 & 46	11-25-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 79 & 80 (NORTH)

PANEL E5H - 20' x 59'-0 3/4"

BLDG. B FLOORS 79 & 80 (WEST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

DESIGN DRAWING NO. 7-AB3-73

PLATE

APPROVED FOR FABRICATION BY: - V. - FOR P.O.N.Y.A. DATE 12/16/69

DRAWN BY: gdc DATE JAN. 15, 1969

APPROVED FOR FABRICATION BY: FOR FABRICATOR DATE

CHECKED BY: T.M.CHURA DATE: JAN. 15, 1969

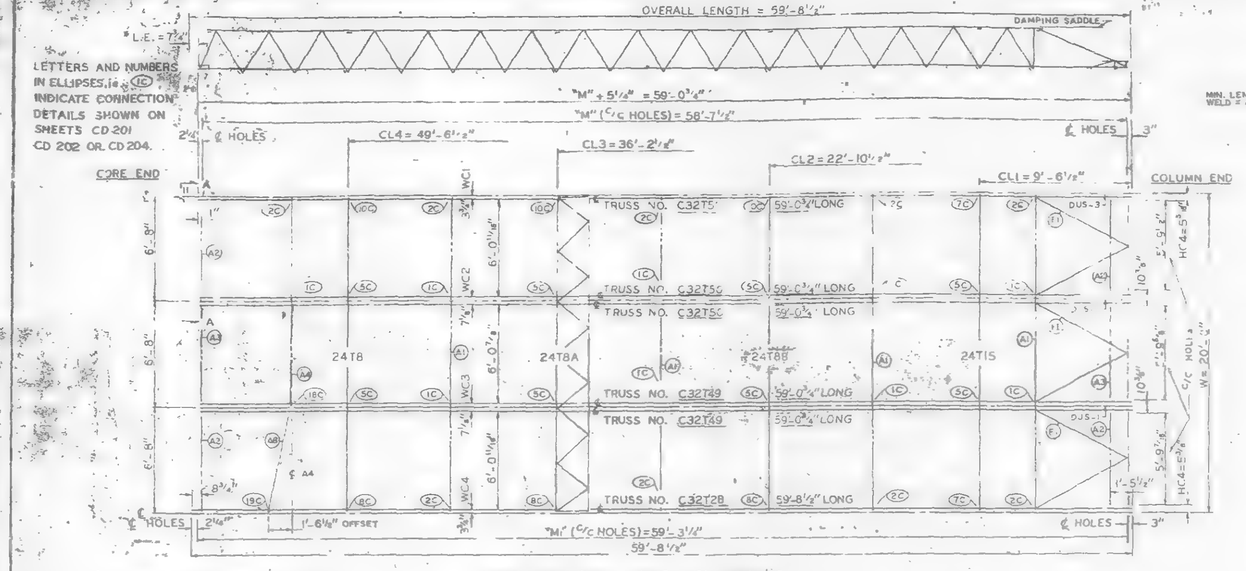
IN CHARGE OF PROD. DEV.

DETAILED

FABRICATION CONT. NO. W.T.C. 221

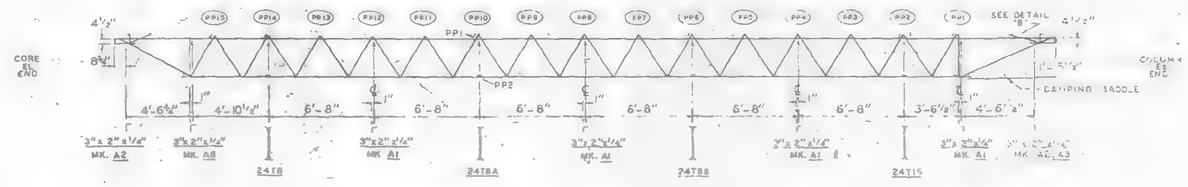
SHEET NO. FP E5H

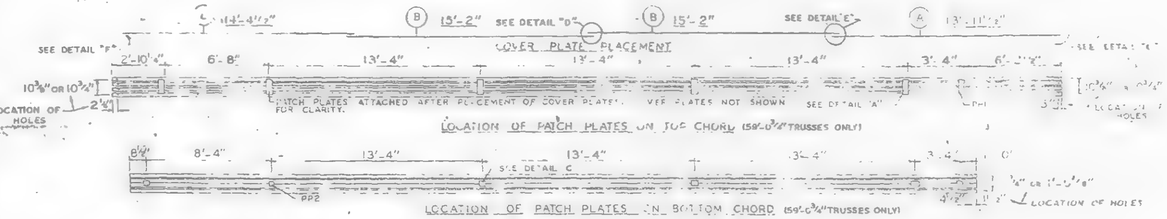
LETTERS AND NUMBERS IN ELLIPSES, ie (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.

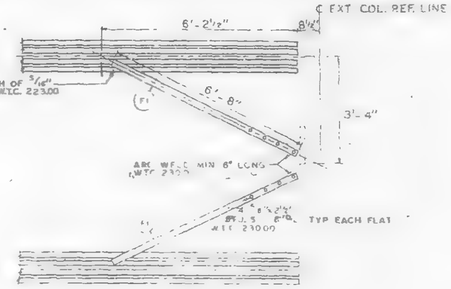


PANEL NO. ER58 SIZE 20' x 59'-8 1/2"

DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.







PLAN OF TOP CHORD SHOWING BRACES PLACE OVER DECK AT W.T.C. 223.00

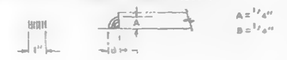
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING

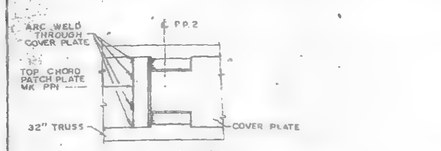
MATERIAL	MK	QTY	MATERIAL SIZE	MFF DRWG.
FLOOR TRUSSES	28	1	C32T2B - 59'-8 1/2"	ST 2028
	49	2	C32T49 - 59'-0 3/4"	ST 249
	50	2	C32T50 - 59'-0 3/4"	ST 250
	5S	1	C32TC - 59'-0 3/4"	ST 251
BRIDGING TRUSSES	1R	1	C4T0A - 19'-11"	BT 2018
	T6A	1	C4T0A - 19'-11"	BT 1CBA
	T1F	1	C4T1F - 19'-11"	BT 1CBe
	T1	1	C4T1 - 19'-11"	BT 1C
3" x 2" x 1/4" ANGLE	A4	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A3	5	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
	A2	1	3" x 2" x 1/4" x 5'-11 7/8"	ST 403
DIAGONAL FLAT		1	3" x 1/4" x 1'-4"	ST 403

ANGLE CLIP	C1	10	2 1/2" x 1 1/2" x 3/16" x 0'-6"	ST 400
	C2	4	2 1/2" x 1 1/2" x 3/16" x 6"	ST 400
DAMPING SADDLE	DJS-1	2	3 1/2" x 3 1/2" x 3/16" x 3'-8 1/8"	ST 228
	DJS-3	1	3 1/2" x 3 1/2" x 3/16" x 3'-8 1/8"	ST 228
CONNECTION EAR	CB	1	1" ø x 1'-3"	ST 400
	CB2	6	3/8" ø x 1'-3"	ST 400
	CB3	6	3/8" ø x 1'-5"	ST 400
CONNECTION PLATES	P1	5	1/4" x 3 1/2" x 1'-0"	ST 400
	P2	1	1/4" x 3 1/2" x 1'-0"	ST 400
	P3	1	1/4" x 3 1/2" x 1'-0"	ST 400
	P5	3	1/4" x 3 1/2" x 1'-6"	ST 400
	P7	1	1/4" x 3 1/2" x 1'-0"	ST 401
"S" SHEAR ANCHOR	SA2	6	1/2" ø x 4'-0"	ST 400
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 1/4" x 1'-1"	ST 400

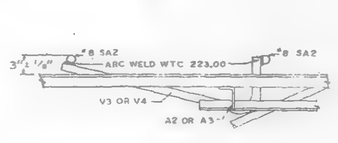
(1) ALL ARC WELD TO BE MADE WITH LOW HY. ROFEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

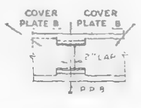




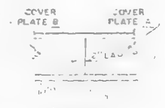
TOP VIEW - DETAIL "A"



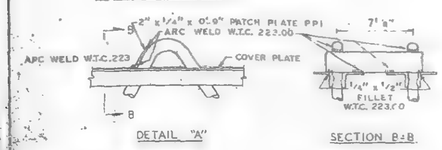
DETAIL "B"



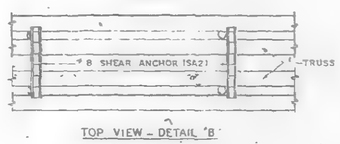
DETAIL "D"



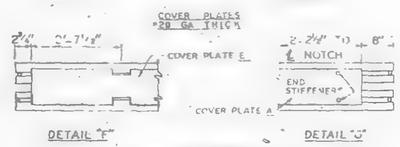
DETAIL "E"



DETAIL "A" SECTION B-B

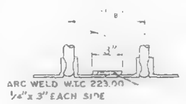


TOP VIEW - DETAIL "B"

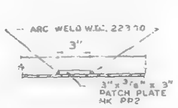


DETAIL "F" DETAIL "G"

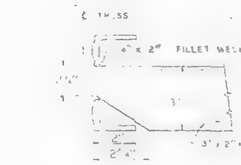
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



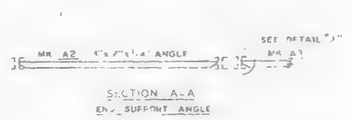
DETAIL "C"



SECTION C-C



DETAIL "J" END SUPPORT ANGLE ATTACHMENT



SECTION A-A END SUPPORT ANGLE

NO	DATE	REVISION	BY

ER58-3&4-3	7-22-68
ER58-74	11-25-68
ER58-3	10-15-68
ER58 15 & 16	7-22-68
ER58-42	10-15-68
ER58-44	11-11-68
7-ER1-3	7-22-68
7-ER1-44,45 & 46	11-25-68

ERECTION DETAILS

83 (NORTH)

ANT. ER58 - 20 x 59'-8 1/2"

BLDG. B FLOORS 83 (WEST)

FABRICATION BY A. C. L. STEEL COMPANY

FABRICATED AT MADISON, WISC.		DESIGN DRAWING NO. ER58 74	DATE
APPROVED FOR FABRICATION BY [illegible] FOR PONTA	DATE 7/31/69	DRAWN BY GAL DATE JAN. 15, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATION	DATE	CHECKED BY T.M.CHUNA DATE JAN. 15, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY [illegible]		FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP ER58

Pacific Steel Co.

LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 OR CD 204.

CORE END

OVERALL LENGTH = 59'-8

DAMPING SADDLE

"M" + 5 1/4" = 59'-0 3/4"

"M" (℄ HOLES) = 58'-7 1/2"

℄ HOLES

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/2"

CL2 = 22'-10' 2"

CL1 = 9'-F 1/2"

COLUMN END

TRUSS NO. C32T51 59'-0 3/4" LONG

TRUSS NO. C32T50 59'-0 3/4" LONG

TRUSS NO. C32T49 59'-0 3/4" LONG

TRUSS NO. C32T49 59'-0 3/4" LONG

TRUSS NO. C32T25 58'-8" LONG

24T8 24T8A 24T8B 24T15

WC1 WC2 WC3 WC4

HC4=5 3/4"

W=20'-0"

1'-6 1/8" OFFSET

"M" (℄ HOLES) = 59'-2 3/4"

59'-8"

PANEL NO. ER5C SIZE 20' x 59'-8"

DIMENSION "E" VARIES ACCORDING TO LENGTH OF C32T2.

PP15 PP14 PP13 PP12 PP11 PP10 PP9 PP8 PP6 PP7 PP5 PP4 PP3 PP2 PP1

PP1

PP2

SEE DETAIL "B"

CORE EL END

COLUMN EL END

DAMPING SADDLE

4'-6 3/4" 4'-10 1/2" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6 1/2" 4'-6 1/8"

3" x 2" x 1/4" MK. A2 | 3" x 2" x 1/4" MK. A3 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A1 | 3" x 2" x 1/4" MK. A2, A3

24T8 24T8A 24T8B 24T15

MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 223.00

℄ EXT. COL. REF LINE

6 - 2 1/2" 8 1/4"

6'-8"

3'-4"

ARC WELD MIN 6" LONG W.T.C. 223.00

F1

6" TYP EACH FLAT W.T.C. 223.00

TYPICAL PLAN OF TOP CHORD OF DIAGONAL FLAT SPACE OVER BLOCK BY W.T.C. 223.00

STUDS W.T.C. 230.00

F1

W.T.C. 214.00

CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL BY PANEL				REF.
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T2C	1	C32T2C - 59'-8"	ST 202C
	T49	2	C32T49 - 59'-0 3/4"	ST 249
	T50	2	C32T50 - 59'-0 3/4"	ST 250
	T51	1	C32T51 - 59'-0 3/4"	ST 251
BRIDGING TRUSSES	T1	1	24T1 - 19'-11"	BT 248
	T6A	1	24T6A - 18'-11"	BT 266A
	T6B	1	24T6B - 18'-11"	BT 266B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	5	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	[illegible]	ST 403
	A3	2	[illegible]	ST 403
	A8	1	[illegible]	ST 403
DIAGONAL FLAT	F1	2	[illegible]	ST 401
	F2	1	[illegible]	ST 401
ANGLE CLIP	C1	-	2" x 2" x 1/4" x 1'-0 1/8"	ST 400
	C7	4	2" x 2" x 1/4" x 1'-0"	ST 400
DAMPING SADDLE	DUS-1	2	3/4" x 3" x 3" x 3 1/4"	ST 298
	DUS-3	1	3/8" x 3 1/2" x 4" x 3'-8 1/2"	ST 298
CONNECTION BAR	CB1	1	[illegible]	ST 400
	CB2	6	3/16" x 4" x 1'-5"	ST 400
	CB3	6	3/16" x 4" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	[illegible]	ST 400
	P2	1	[illegible]	ST 400
	P3	1	[illegible]	ST 400
	P4	3	[illegible]	ST 400
	P7	1	[illegible]	ST 401
"B" SHEAR ANCHOR	SA2	℄	[illegible]	ST 415
PATCH PLATES	PP1	18	2" x 4" x 3'-0"	ST 400
	PP2	18	3" x 3" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

A = 1/4" B = 1/4"

1"

COVER PLATE PLACEMENT

SEE DETAIL "F" SEE DETAIL "B" SEE DETAIL "C" SEE DETAIL "G"

14'-4 1/2" 15'-2" 15'-2" 3'-11 1/2"

2'-10 1/4" 6'-8" 13'-4" 13'-4" 13'-4" 3'-3" 6'-2 1/2"

10 3/8" OR 10 3/4" LOCATION OF HOLES 2 1/2"

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN

SEE DETAIL "A" PP1 3" 10 3/8" OR 10 3/4" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)

8 1/4" 8'-4" 13'-4" 13'-4" 13'-4" 3'-4" 1'-0"

SEE DETAIL C PP2

1 3/4" OR 1'-0 5/8" 1 1/2" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)

TRUSS

4" x 2" FILLET WELD 223.00

1/4" 3" 2" 2 1/2" 3" x 2" x 1/4" x

DETAIL "J" END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

SEE DRWGS

7-AB2-3 & 4	7-22-68
7-AB3-74	11-25-68
7-AB4-1	10-15-68
7-AB4-11 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-44,45 & 46	11-25-68

ARC WELD THROUGH COVER PLATE

TOP CHORD PATCH PLATE MK. PP1

32" TRUSS

COVER PLATE

℄ PP2

TOP VIEW - DETAIL "A"

"B SA2

3" ± 1/8"

ARC WELD W.T.C. 223.00

W3 OR W4

A2 OR A3

DETAIL "B"

COVER PLATE B COVER PLATE B

2" LAP

℄ ER9

DETAIL "D"

COVER PLATE B COVER PLATE A

2" LAP

DETAIL "E"

SEE DETAIL "J"

MK. A2 MK. A3

SECTION A-A END SUPPORT ANGLE

3" x 2" x 1/4" ANGLE

2" x 2" x 1/4" x 0'-8"

ARC WELD W.T.C. 223.00

3" x 2" x 1/4" x 0'-9" PATCH PLATE PP1

ARC WELD W.T.C. 223.00

COVER PLATE

7'-8"

1/4" x 1/2" FILLET W.T.C. 223.00

B

DETAIL "A"

SECTION B-B

"B SHEAR ANCHOR (SA2)

TRUSS

TOP VIEW - DETAIL "B"

COVER PLATES = 29 GA. THICK

2 3/4" 21'-7 1/8"

COVER PLATE E

DETAIL "F"

2-2 1/2" "D" NOTCH

END STIFFENERS

COVER PLATE A

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

ARC WELD W.T.C. 223.00 1/4" x 3" EACH SIDE

C

DETAIL "C"

ARC WELD W.T.C. 223.00

3"

3" x 3" x 9" PATCH PLATE MK. PP2

SECTION C-C

FLOOR PLAN - DETAILS

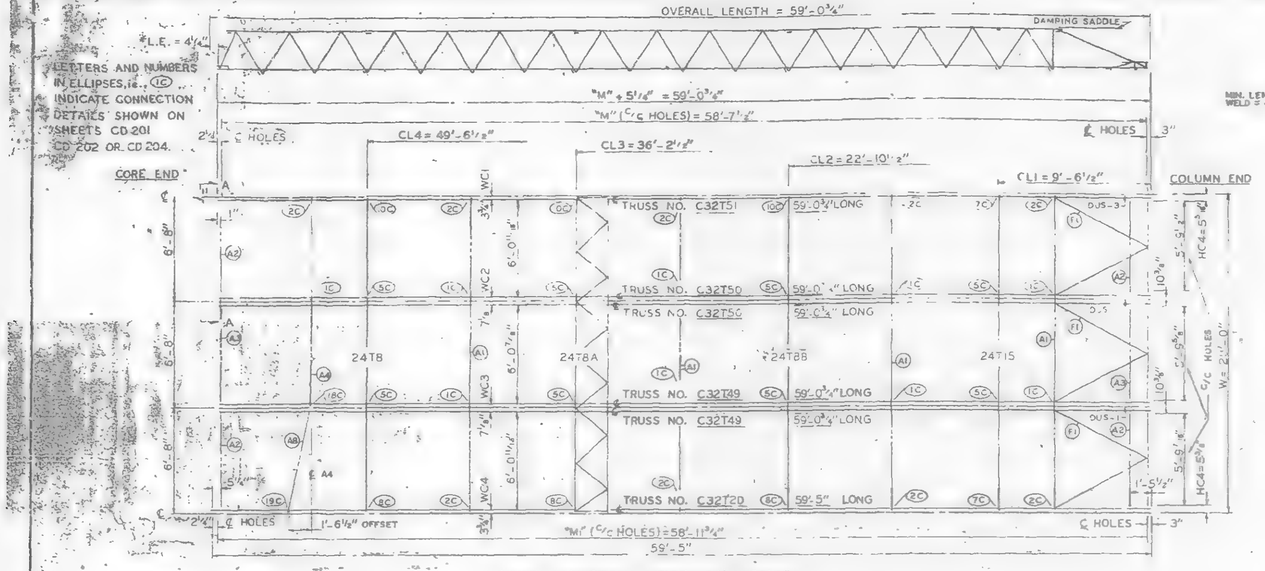
BLDG. B FLOORS 49 & 79 (SOUTH)

PANEL ER5C - 20' x 59'-8"

BLDG. B FLOORS 49 & 79 (EAST)

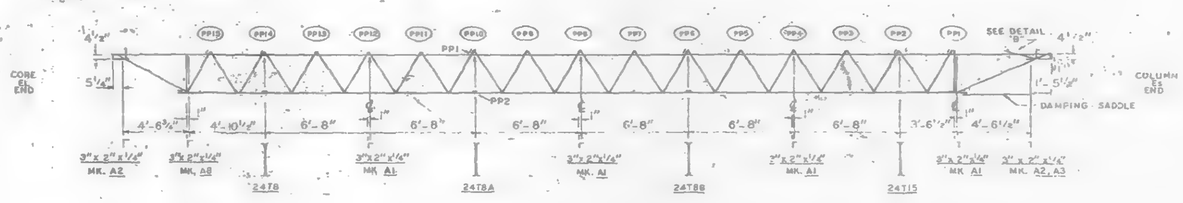
FABRICATION BY	[illegible] STEEL COMPANY	
FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7 AB3 74	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 7/21/69	DRAWN BY [illegible] DATE JAN. 15, 1969
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JAN. 15, 1969
DETAILED BY [illegible] CARL WEBER	FABRICATION CONT. NO. W.T.C. 221	IN CHARGE OF PROD. DEV.
		SHEET NO. FP ER5C

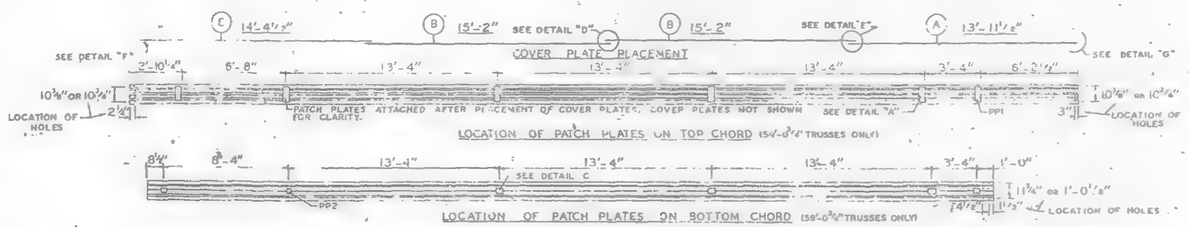
LETTERS AND NUMBERS IN ELLIPSES, i.e., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.

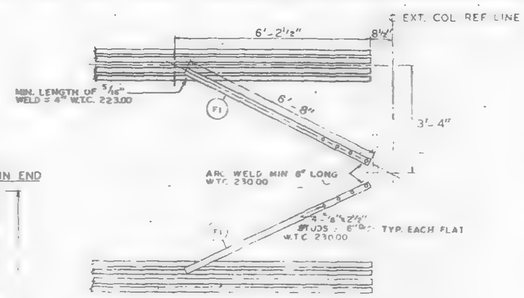


DIMENSION "L.E." VARIES ACCORDING TO LENGTH OF C32T2.

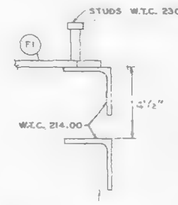
PANEL NO. ER5D SIZE 20' x 59'-5"







PLAN OF TOP CHORD CONNECTION MK. END DIAGONAL TRUSS ANGLES AND OVER DECK BY W.T.C. 223.00

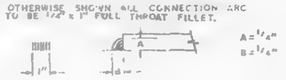


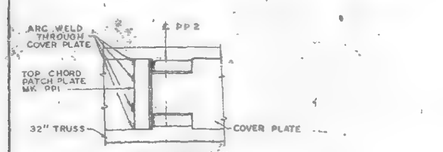
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN. CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				EFF
MATERIAL	MK	PCS	SIZE	DRWG
FLOOR TRUSSES	T2D	1	C32T2D - 59'-5"	ST 2020
	T49	2	C32T49 - 59'-0 3/4"	ST 249
	T50	2	C32T50 - 59'-0 3/4"	ST 250
	T51	1	C32T51 - 59'-0 3/4"	ST 251
SPLICING PLATES	T8A	2	24" - 19'-11"	BT 208
	T8B	2	24"x - 19'-11"	BT 208A
	T8E	2	24"x - 19'-11"	BT 208B
	T8F	2	24"x - 19'-11"	BT 208
3"x 2"x1/4" ANGLE	A1	4	3" x 2" x 4" x 19'-11"	ST 403
	A2	4	3" x 2" x 4" x 5'-7 3/4"	ST 403
	A3	2	3" x 2" x 4" x 5'-7 3/4"	ST 403
	A4	2	3" x 2" x 4" x 5'-7 3/4"	ST 403
	A8	2	3" x 2" x 4" x 6'-1"	ST 403
DIAGONAL FLATS	B	2	6" x 3/16" x 6'-1"	ST 403
	C	2	6" x 3/16" x 5'-7 3/4"	ST 403
	D	2	6" x 3/16" x 5'-2"	ST 403
	E	2	6" x 3/16" x 4'-8 1/2"	ST 403
ANGLE CLIPS	C1	10	2" x 2" x 3 1/2" x 0'-6"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 8"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3" x 3/16" x 3'-6 7/8"	ST 298
	DUS-3	1	3/16" x 3" x 3/16" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	1	1" ø x 1'-3"	ST 400
	CB2	6	3/4" ø x 1'-3"	ST 400
	CB3	8	1" ø x 1'-5"	ST 400
CONNECTION PLATES	C1	5	3/8" x 1'-4 1/2" x 1'-4 1/2"	ST 400
	F2	1	4" x 1'-4 1/2" x 1'-4 1/2"	ST 400
	P3	1	4" x 3/4" x 1'-4 1/2"	ST 400
	F5	3	4" x 1'-4 1/2" x 1'-6"	ST 400
	PF	1	4" x 1'-4 1/2" x 1'-6"	ST 401
8 SHEAR ANCHOR OF	SA2	0	8 SHEAR ANCHOR	ST 400
PATCH PLATES	PP1	18	3" x 3" x 0'-9"	ST 400
	PP2	18	3" x 3/4" x 0'-9"	ST 400

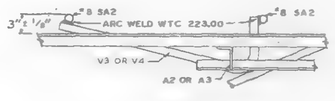
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

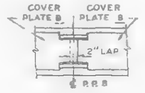




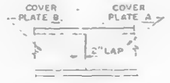
TOP VIEW - DETAIL "A"



DETAIL "B"

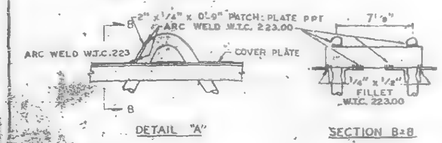


DETAIL "D"

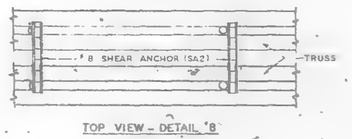


DETAIL "E"

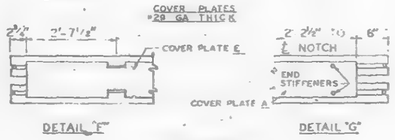
SECTION A-A
END SUPPORT ANGLE



DETAIL "A" SECTION B-B

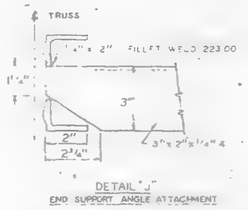


TOP VIEW - DETAIL "8"



DETAIL "F" DETAIL "G"

DETAIL "C" SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

PREV. DWGS.

7-AB1-44,45 & 46	7-22-68
7-AB1-74	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-44,45 & 46	11-25-68

FLOOR PANEL DETAILS

AIRPORT TERMINAL - N.Y.

THE PORT OF NEW YORK AUTHORITY

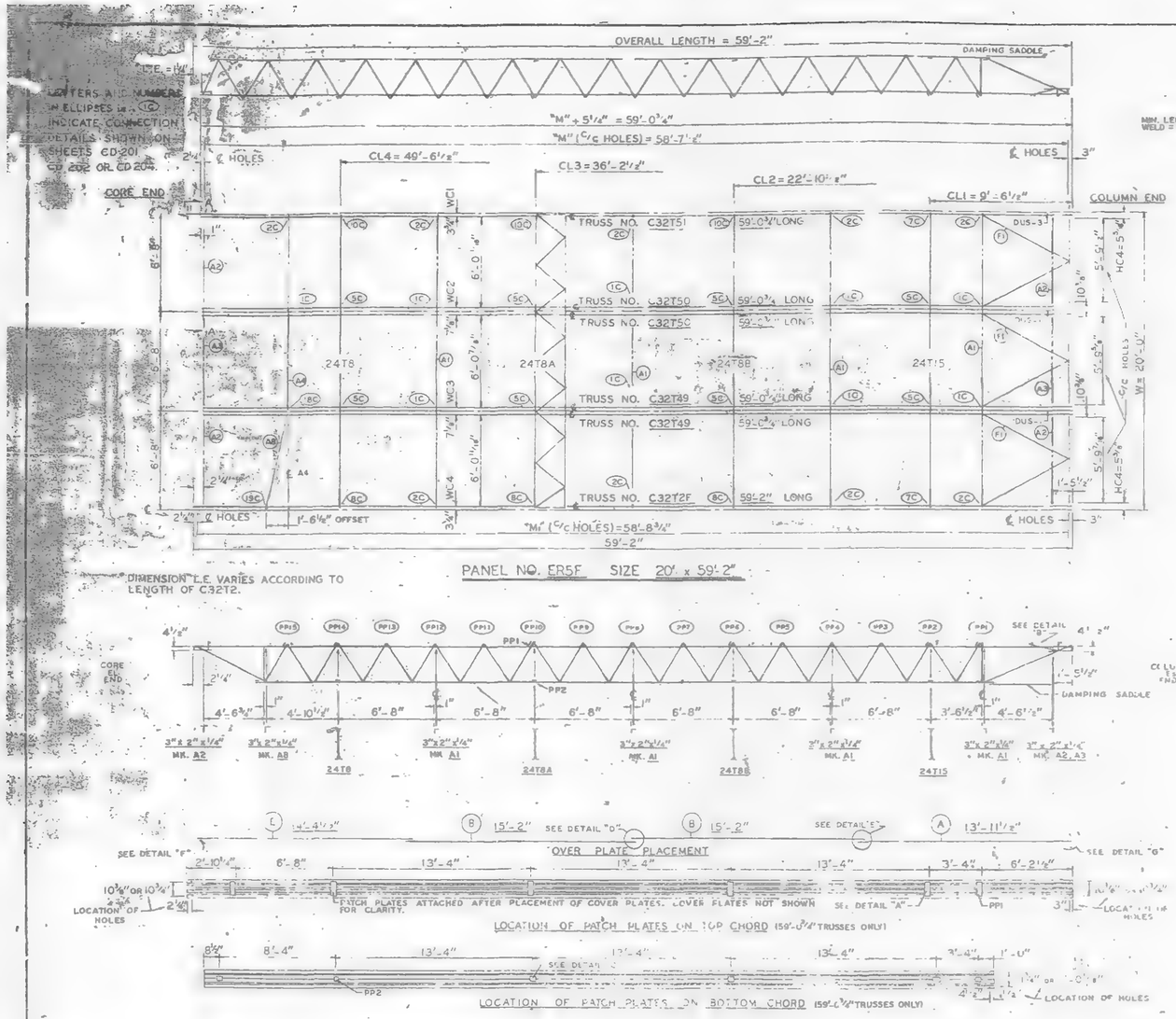
BLDG. A FLOORS 81 & 82 (NORTH)

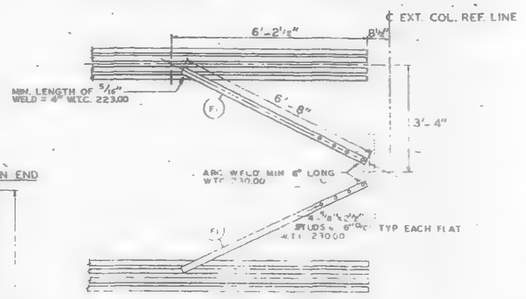
PANEL ER5D - 20'-0" x 59'-5"

BLDG. B FLOORS 81 & 82 (WEST)

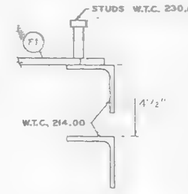
FABRICATION BY ACME STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS	DESIGN DRAWING NO. 7 AB3 74	PLATE
APPROVED FOR FABRICATION BY A.L. FOR PONYA DATE 12/4/69	DRAWN BY GdS DATE JAN 15, 1969	
APPROVED FOR FABRICATION FOR FABRICATOR DATE	CHECKED BY T.M. CHURA DATE JAN. 15, 1969	IN CHARGE OF PROD DEV.
DETAILED BY ACME STEEL CO. CHICAGO, ILL.	FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP ER5D





TYPICAL PLAN OF TOP CHORD DIAGONAL FLATS AT EXTERIOR COLUMN LINE OVER DECK BY W.T.C. 223.00

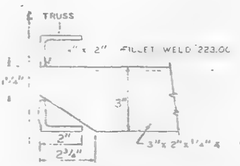


CEILING ANGLE LOCATION FOR DIAGONAL FLATS 4'-1/2" ABOVE COLUMN CLIPS FOR CROSS BEARING.

REQUIRED MATERIAL PER PANEL				REF DRWG
MATERIAL	MK	PCS	SIZE	
FLOOR TRUSSES	T2F	1	C32T2F - 59'-2"	ST 202F
	T49	2	C32T49 - 59'-0 3/4"	ST 249
	T50	2	C32T50 - 59'-0 3/4"	ST 250
	T51	1	C32T51 - 59'-0 3/4"	ST 251
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	BT 218
	T8A	1	24T8A - 19'-11"	BT 208A
	T8B	1	24T8B - 19'-11"	BT 208B
	T15	1	24T15 - 19'-11"	BT 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-3"	ST 403
	A4	2	3" x 2" x 1/4" x 4'-2"	ST 403
DIAGONAL FLAT	F1	8	3/8" x 6" x 1'-0"	ST 303
COVER PLATE	A	2	1/4" x 19'-11 1/2" x 4'-8"	ST 303
	B	2	1/4" x 19'-11 1/2" x 4'-8"	ST 303
	C	2	1/4" x 19'-11 1/2" x 4'-8"	ST 303
ANGLE CLIP	C1	20	2" x 2 1/2" x 3 1/4" x 0'-6"	ST 400
	C2	4	2" x 2 1/2" x 3 1/4" x 0'-6"	ST 400
DAMPING SADDLE	DUS-2	2	3/16" x 1'-9" x 3'-6 3/4"	ST 298
	DUS-3	1	3/16" x 3'-9" x 3'-6 3/4"	ST 298
CONNECTION BAR	CB1	1	1" ø x 1'-3"	ST 400
	CB2	8	1" ø x 1'-3"	ST 400
	CB3	8	1" ø x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3/16" x 2'-6" x 0'-7"	ST 400
	P2	1	3/16" x 1'-0" x 0'-7"	ST 400
	P3	1	3/16" x 1'-0" x 0'-7"	ST 400
	P5	2	3/16" x 1'-6" x 0'-7"	ST 400
	P7	1	3/16" x 2'-0" x 0'-7"	ST 400
TOP CHORD SHEAR CONNECTOR	SA2	6	3/4" ø STUD ARC WELD	ST 400
PATCH PLATES	PP1	18	2" x 4" x 0'-9"	ST 400
	PP2	18	3" x 3" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

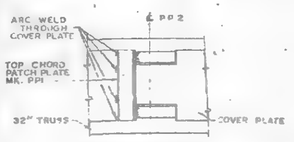


DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

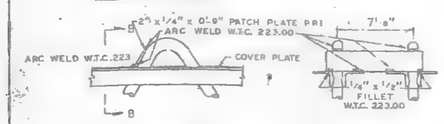
NO.	DATE	REVISION	BY

PREVIOUS DRAWGS.

7-AB2-3 & 7	7-22-68
7-AB2-74	11-25-68
7-AB4-1	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-44,45 & 46	11-25-68

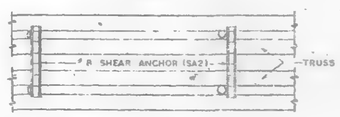


TOP VIEW - DETAIL "A"

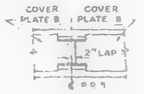


DETAIL "B" SECTION B-B

DETAIL "C"

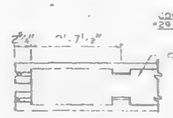


TOP VIEW - DETAIL "B"

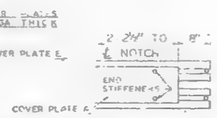


DETAIL "D"

DETAIL "E"



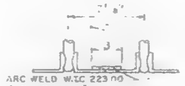
DETAIL "F"



DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00

SECTION A-A
END SUPPORT ANGLE



DETAIL "C"

SECTION C-C

FLOOR PANEL DETAILS

FOR

[illegible]

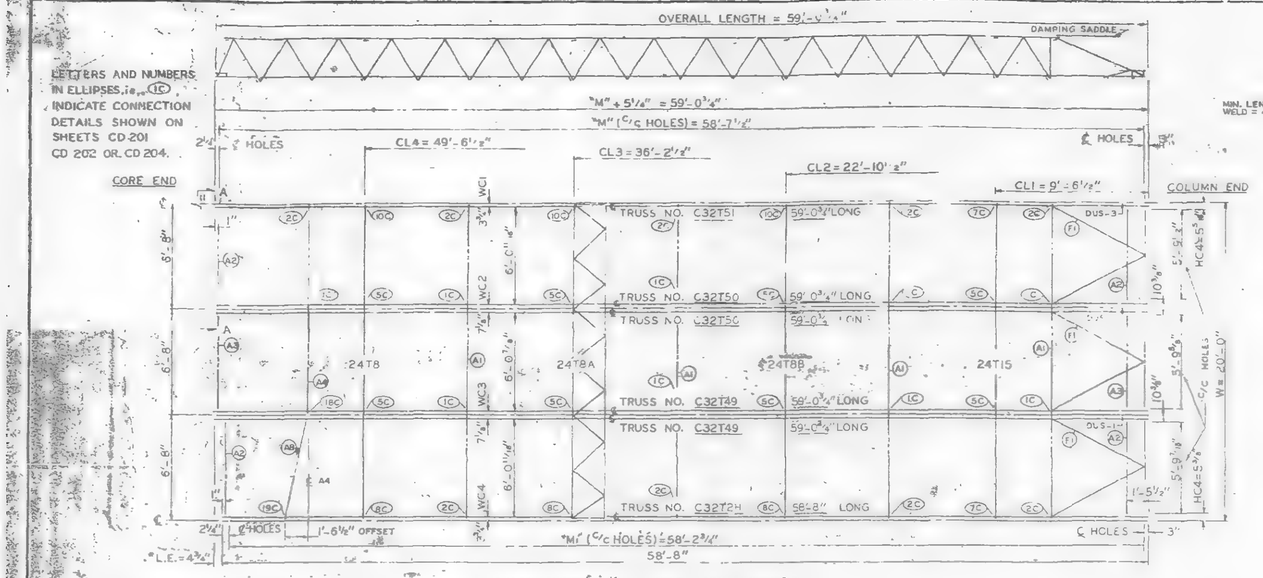
BLDG. B FLOORS 47 & 48 (SOUTH)

PANEL ERSF - 20' x 59'-2"

BLDG. B FLOORS 47 & 48 (EAST)

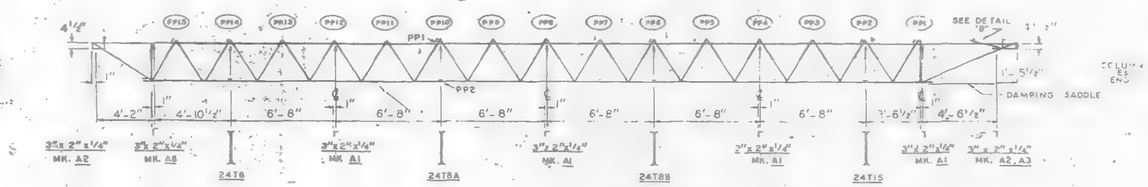
FABRICATION BY ACME STEEL COMPANY			
FABRICATED AT MADISON, ILLINOIS		DETAIL DRAWING NO. AB3 74	PLATE
APPROVED FOR FABRICATION BY [illegible] FOR PONTIAC	DATE 7/24/69	DRAWN BY gdc DATE JAN. 15, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JAN. 15, 1969	IN CHARGE OF PROJ. DEV.
DETAILED BY A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP ERSF 2

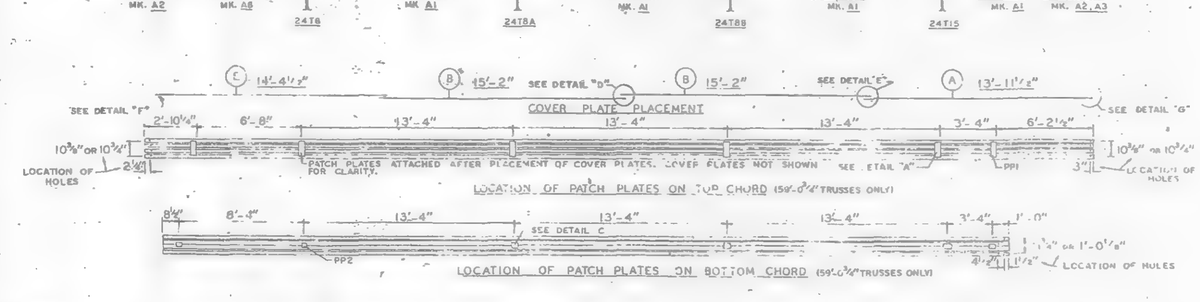
LETTERS AND NUMBERS IN ELLIPSES, ie, (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD-201 CD 202 OR CD 204.

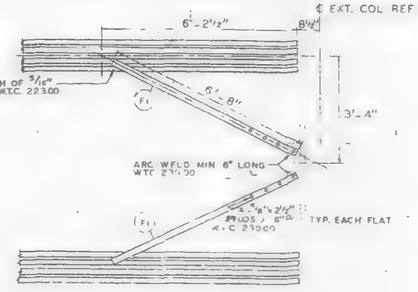


"DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.

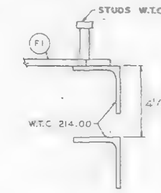
PANEL NO. ERSH SIZE 20' x 59'-0 3/4"







TYPICAL PLAN OF TOP CHORD CLIP AND DIAGONAL TRUSS BRACE FLANGE OVER DECK BY W.T.C. 223.00

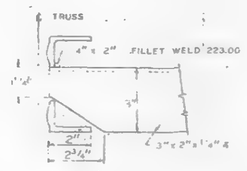


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	NO.	SIZE	DRWG.
FLOOR TRUSSES	T2H	1	C32T2H - 58'-8"	ST 202H
	T49	2	C32T49 - 59'-0 3/4"	ST 249
	T50	2	C32T50 - 59'-0 3/4"	ST 250
	T51	1	C32T51 - 59'-0 3/4"	ST 251
[illegible] GING TRUSSES	T8	1	24T8 - 19'-11"	BT 208
	T8A	1	24T8A - 19'-11"	BT 208A
	T8B	1	24T8B - 19'-11"	BT 208B
	T15	1	24T15 - 19'-11"	BT 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x [illegible]	ST 403
	A3	2	3" x 2" x 1/4" x 5'-1 1/8"	ST 403
	[illegible]	2	3" x 2" x 1/4" x [illegible]	ST 403
	A8	2	3" x 2" x 1/4" x 6'-3 1/8"	ST 403
DIAGONAL FLATS	[illegible]	[illegible]	[illegible]	[illegible]
COVER PLATES	A	1	9'-6" x 0'-13 5/8" x 13'-11 3/4"	ST 303
	B	2	9'-6" x 0'-13 5/8" x 5'-2"	ST 303
	[illegible]	1	9'-6" x 0'-13 5/8" x 4'-4 1/2"	ST 303
ANGLE CLIPS	C1	10	2" x 2" x 1/4" x 0'-4"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3/16" x 3/16" x 3/4" x 3'-6 7/8"	ST 298
	DUS-3	1	3/16" x 3/16" x 3/4" x 3'-6 7/8"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	3/4" ϕ x 1'-3"	ST 400
	CB3	6	1 5/8" ϕ x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3 1/2" x 3/8" x 1'-1"	ST 400
	P2	1	4'-2" x 3/8" x 1'-0"	ST 400
	P3	1	4'-2" x 3/8" x 1'-0"	ST 400
	P4	3	4'-2" x 1 1/4" x 1'-8"	ST 400
	P5	1	4'-2" x [illegible] x 0'-[illegible]	ST 401
"B" SHEAR ANCHOR	SA2	[illegible]	3" x 3/4" x [illegible]	ST 400
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"	ST 400
	PP2	18	3" x 3/8" x 1'-2"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

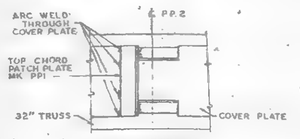
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



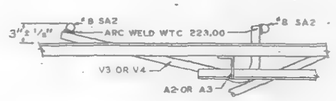
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

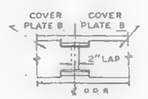
[illegible]	7-22-68
[illegible]	11-25-68
[illegible]	10-15-68
7-AB4-1, 3 & 8	7-22-68
7-AB3-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-44, 45 & 46	11-25-68



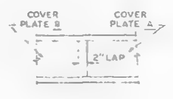
TOP VIEW - DETAIL "A"



DETAIL "B"

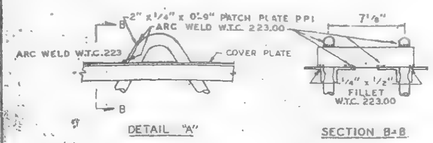


DETAIL "D"

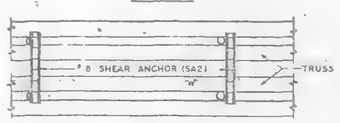


DETAIL "E"

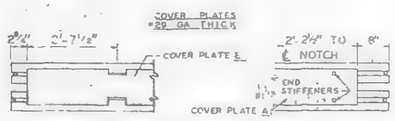
SECTION A-A
END SUPPORT ANGLE



DETAIL "A" SECTION B-B

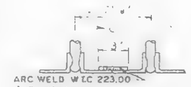


TOP VIEW - DETAIL "B"

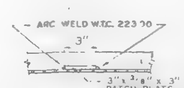


DETAIL "F" DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "C"



SECTION C-C

FLOOR PANEL DETAILS

[illegible] TRADE CENTER - N.Y.

FOR

THE PORT OF NEW YORK AUTHORITY

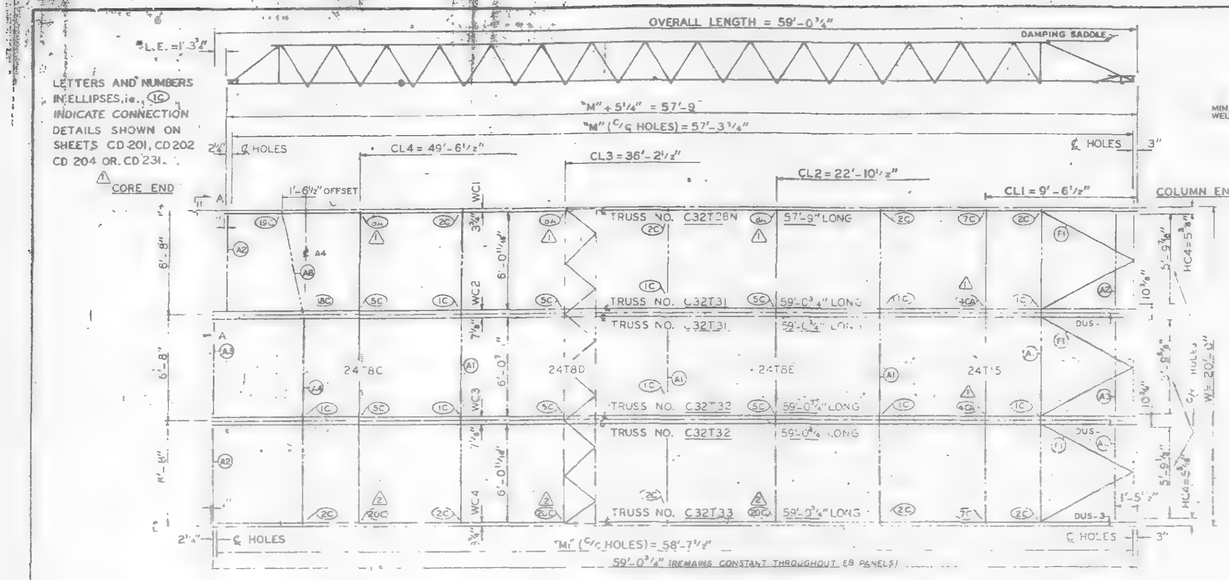
BLDG. A FLOORS 79 & 80 (NORTH)

PANEL ERSH- 20'-0" x 59'-0 3/4"

BLDG. B FLOORS 79 & 80 (WEST)

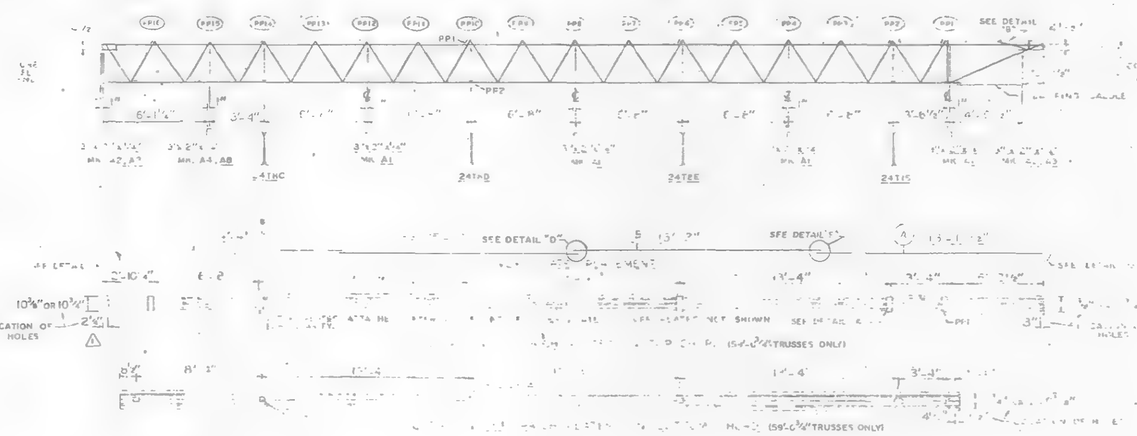
FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7 AB3 74	PLATE 1 of 1
APPROVED FOR FABRICATION BY [illegible] FOR P.O.N.Y.A.	DATE 7/3/69	DRAWN BY gdc DATE JAN. 15, 1969	
APPROVED FOR FABRICATION BY [illegible] FOR FABRICATOR	DATE	CHECKED BY T.M. CHURA DATE JAN. 15, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY A. CARL WEBER	LACLEDE STEEL CO.	FABRICATION CONT. NO W.T.C. 221	SHEET NO. FP ERSH



PANEL NO. E8N SIZE 20' x 59'-0 3/4"

"DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28.



LETTERS AND NUMBERS IN ELLIPSES, ie., (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 204 OR CD 231

OVERALL LENGTH = 59'-0 3/4"

"L.E." 3"

DAMPING SADDLE

"M" + 5 1/16" = 57'-9"

"M" (℄ HOLES) = 57'-3 3/4"

℄ HOLES

CL4 = 49'-6 1/2"

CL3 = 36'-2 1/8"

CL2 = 22'-10 1/8"

CL1 = 9'-6 1/2"

CORE END

COLUMN END

1'-6 1/2" OFFSET

TRUSS NO. C32T28N 57'-9" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T31 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T32 59'-0 3/4" LONG

TRUSS NO. C32T33 59'-0 3/4" LONG

24T8C 24T8D 24T8E 24T1S

WC1 WC2 WC3 WC4

HC4 = 5'-8 3/4" HC4 = 5'-9 1/4" W = 20'-0"

DUS-1 DUS-2 DUS-3

1'-5"

2 1/2" ℄ HOLES

"M" (℄ HOLES) = 58'-7 1/2"

℄ HOLES 3"

59'-0 3/4" (REMAINS CONSTANT THROUGHOUT EB PANELS)

PANEL NO. E8N SIZE 20' x 59'-0 3/4"

"DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T28"

PP1 PP2 PP3 PP4 PP5 PP6 PP7 PP8 PP9 PP10 PP11 PP12 PP13 PP14 PP15

SEE DETAIL "B"

CORE END

DAMPING SADDLE

COLUMN END

6'-1 1/4" 3'-4" 6'-8" 6'-8" 6'-8" 6'-8" 6'-8" 3'-6 1/2" 4'-8 1/2"

3" x 2" x 1/4" MK. A2, A3 3" x 8" x 1/4" MK. A4, A8 3" x 2" x 3/16" MK. A1 3" x 2 1/2" x 1/4" MK. A1 2" x 2" x 1/4" MK. A1 3" x 2" x 1/4" MK. A1 3" x 2" x 1/4" MK. A2, A3

24T8C 24T8D 24T8E 24T1S

E 14'-4 1/2" B 15'-2" SEE DETAIL "D" B 15'-2" SEE DETAIL "E" A 13'-11 1/2"

SEE DETAIL "F" SEE DETAIL "G"

COVER PLATE PLACEMENT

2'-10 1/4" 6'-8" 13'-4" 13'-4" 13'-4" 3'-4" 6'-2 1/2"

10 3/16" OR 10 3/4" LOCATION OF HOLES 2 1/2"

PATCH PLATES ATTACHED AFTER PLACEMENT OF COVER PLATES. COVER PLATES NOT SHOWN FOR CLARITY.

SEE DETAIL "A"

PP1

10 3/16" OR 10 3/4" 3" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON TOP CHORD (59'-0 3/4" TRUSSES ONLY)

8 1/2" 8'-4" 13'-4" 13'-4" 13'-4" 3'-4"

SEE DETAIL C

PP2

3/4" OR 1'-0 1/8" 2'-2 1/2" 11'-1" LOCATION OF HOLES

LOCATION OF PATCH PLATES ON BOTTOM CHORD (59'-0 3/4" TRUSSES ONLY)

ARC WELD THROUGH COVER PLATE

TOP CHORD PATCH PLATE MK. PP1

℄ PP2

32" TRUSS

COVER PLATE

TOP VIEW - DETAIL "A"

3" x 1/16" *8 SA2 ARC WELD WTC 223.00 V3 OR V4 A2 OR A3

DETAIL "B"

COVER PLATE B COVER PLATE B 2" LAP ℄ PP8

DETAIL "D"

COVER PLATE B COVER PLATE A 2" LAP

DETAIL "E"

2" x 1/4" x 1'-0" PATCH PLATE PP1 ARC WELD WTC 223.00 ARC WELD WTC 223 COVER PLATE B

DETAIL "A"

1'-4" x 1/2" FILLET WTC 223.00

SECTION B-B

*8 SHEAR ANCHOR (SA2) TRUSS

TOP VIEW - DETAIL "B"

COVER PLATES *28 GA THICK

2'-2" 0'-7 1/8" COVER PLATE E

DETAIL "F"

2'-2 1/2" TYP 6" NOTCH END STIFFENERS COVER PLATE A

DETAIL "G"

FIELD PUNCH COVER PLATES OVER END STIFFENERS WTC 223.00

℄ EXT. COL REF LINE

6'-2 1/2" 8 1/4"

MIN. LENGTH OF 5/16" WELD = 4" W.T.C. 22300

TYP EACH FLG

TYP WTC 220.00

SEE DETAIL "J"

DETAIL "C"

TRUSS

3" x 2" FILLET WELD WTC 223.00

DETAIL "J"

END SUPPORT ANGLE ATTACHMENT

SECTION C-C

PATCH PLATE PP2

ARC WELD WTC 223.00 1/4" x 3" EACH SIDE

3"

REQUIRED MATERIAL PER PANEL

MATERIAL	MK	PCS.	SIZE	REF. DRWG.
FLOOR TRUSSES	T28N	1	C32T28N - 57'-9"	ST 228N
	T31	2	C32T31 - 59'-0 3/4"	ST 231
	T32	2	C32T32 - 59'-0 3/4"	ST 232
	T33	1	C32T33 - 59'-0 3/4"	ST 233
BRIDGING TRUSSES	T8C	1	24T8C - 9'-11"	ST 208C
	T8D	1	24T8D - 9'-11"	ST 208D
	T8E	1	24T8E - 9'-11"	ST 208E
	T1S	1	24T1S - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 3/16"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 3/16"	ST 403
	A4	1	3" x 2" x 1/4" x 3'-5 3/16"	ST 403
	A8	1	3" x 2" x 1/4" x 5'-3"	ST 403
DIAGONAL FLATS	[illegible]	[illegible]	[illegible]	[illegible]
PLATES	A	3	9" x 0'-2 5/8" - 13'-11 3/4"	ST 303
	B	6	9" x 0'-2 5/8" - 15'-2"	ST 303
	L	3	9" x 0'-2 5/8" - 4'-4 1/4"	ST 303
ANGLE CLIP	C1	10	2" x 2" x 1/4" x 0'-4"	ST 400
	C2	4	2" x 2" x 1/4" x 0'-8"	ST 400
ANGLE SADDLE	DA	2	3" x 2" x 1/4" x 0'-8"	ST 426
	DA1S	1	3" x 2" x 1/4" x 0'-8"	ST 284
CONNECTION BAR	CB	1	4" x 2" x 1/4" x 1'-0"	ST 400
	CB1	1	4" x 2" x 1/4" x 1'-3"	ST 400
	CB2	6	4" x 2" x 1/4" x 0'-5"	ST 400
CONNECTION PLATES	P1	5	3" x 2" x 1/4" x 0'-8"	ST 400
	P2	1	4" x 2" x 1/4" x 0'-10"	ST 400
	P3	1	4" x 2" x 1/4" x 1'-0"	ST 406
	P5	1	4" x 2" x 1/4" x 0'-6"	ST 400
	P8	1	4" x 2" x 1/4" x 0'-8"	ST 401
"B" SHEET STOCK	SA2	[illegible]	[illegible]	[illegible]
PATCH PLATES	PP1	10	3" x 2" x 1/4" x 1'-0"	ST 400
	PP2	18	3" x 2" x 1/4" x 0'-8"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70C SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL INTRAP FILLET.

A = 1/4" B = 1/4"

NO	DATE	REVISION	BY
1	4-24-69	AS NOTED	G.D.C.

[illegible]	10	7-22-68
[illegible]	60	1-6-69
[illegible]		10-15-68
[illegible]	6	7-22-68
[illegible]	32	10-15-68
[illegible]	24	1-6-69
7-481-25 & 28		1-6-69
7-481-29 & 30		1-6-69
7-482-19		1-6-69

[illegible] PANEL DETAILS

[illegible] AUTHORITY

[illegible] 44 (SOUTH ONLY)

PANEL E8N SIZE = 59'-0 3/4"

[illegible] MEANY

ENGR. DRAWING NO. AF 60

PLATE

DRAWN BY [illegible] DATE APRIL 2, 1968

CHECKED BY F.M. CHURA DATE APRIL 2, 1968

IN CHARGE OF PROD. DEV.

FABRICATION FONT NO. W.T.C. 221

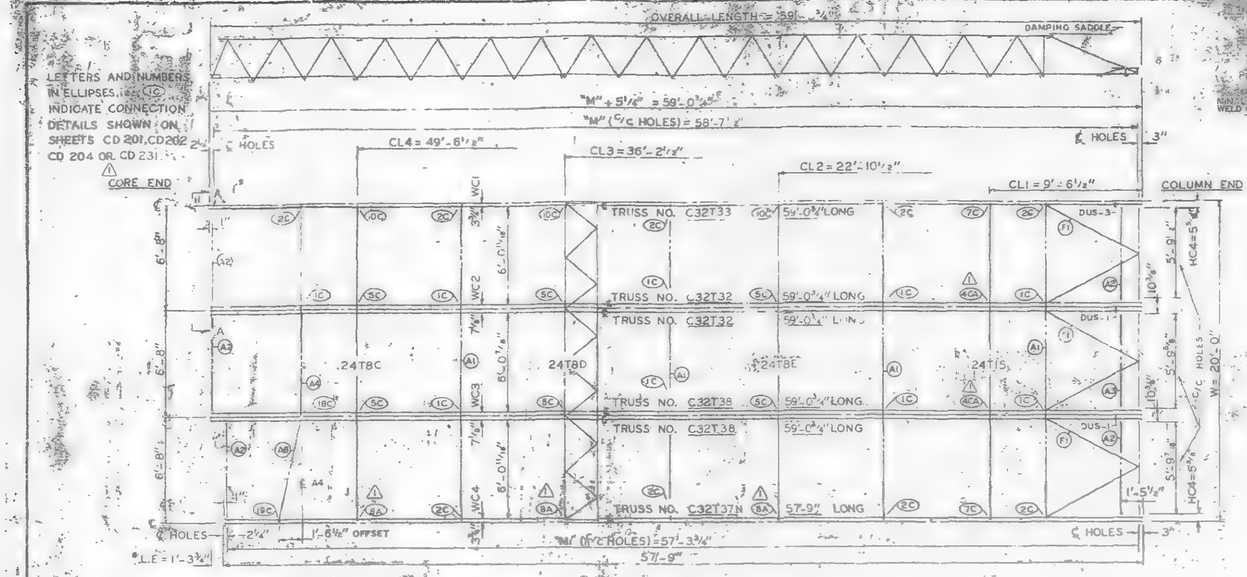
SHEET NO. FP E8N

[illegible] 6/12/69

[illegible] FOR FABRICATION

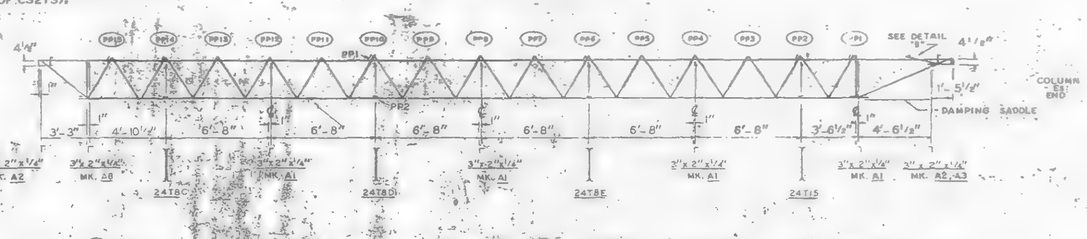
[illegible] RETAINED

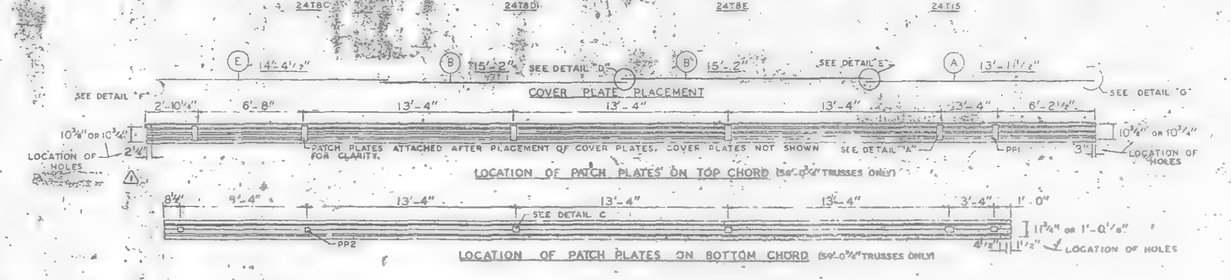
LETTERS AND NUMBERS IN ELLIPSES, i.e. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201, CD 202 CD 204 OR CD 231.

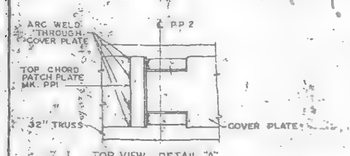


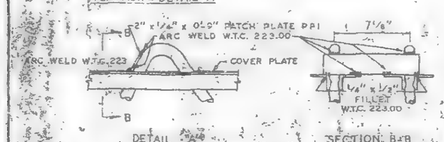
PANEL NO. ERBN SIZE 20' x 59'-0 3/4"

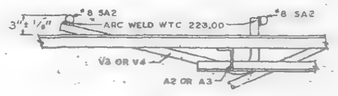
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T37.

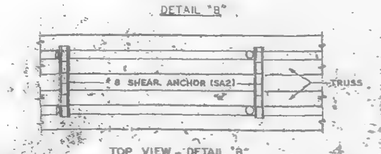


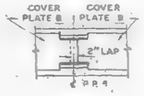


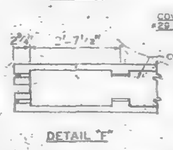


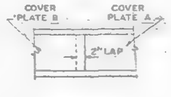




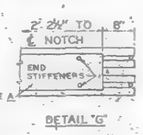




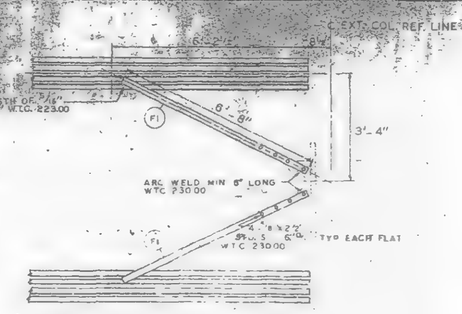




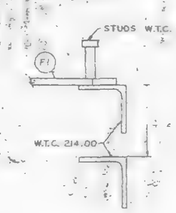
COVER PLATES #22 GA. THICK



FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



TYPICAL PLAN OF TOP CHORD C.L.MT. END DIAGONAL TRUSS BRACES IN PLACE OVER DECK BY WTC (C.S.)

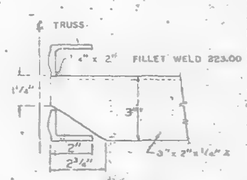


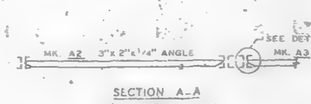
CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-1/8" ABOVE COLUMN-CLIPS FOR TRUSS BEARING.

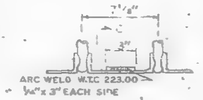
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DRWG
FLOOR TRUSSES	T32	2	C32T32 - 59'-6 3/4"	ST 232
	T33	1	C32T33 - 59'-3 3/4"	ST 233
	T37N	1	C32T37N 57'-9"	ST 237N
	T38	2	C32T38 - 59'-3 3/4"	ST 238
BRIDGING TRUSSES	T8C	1	24T8C - 9'-11"	ST 248C
	T8D	1	24T8D - 9'-11"	ST 248D
	T8E	1	24T8E - 9'-11"	ST 248E
	T15	1	24T15 - 9'-11"	ST 215
3"x 2"x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 10'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 9'-11"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11"	ST 403
	A4	1	3" x 2" x 1/4" x 2'-6"	ST 403
	A5	1	3" x 2" x 1/4" x 4'-6 1/2"	ST 403
DIAGONAL PLATE	A6	1	1/4" x 1'-3" x 1'-3"	ST 303
	A	4	1/4" x .0135" x 13'-1 1/2"	ST 303
	B	4	1/4" x .0135" x 15'-2"	ST 303
	C	4	1/4" x .0135" x 4'-8 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-2	2	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-6 1/2"	ST 298
CONNECTION BAR	CB1	1	1" x 3" x 3"	ST 400
	CB2	6	3/4" x 1'-3"	ST 400
	CB3	6	1/2" x 1'-5"	ST 400
CONNECTION PLATES	P	5	3 1/2" x 3" x 1/4" x 1'-1"	ST 400
	P2	1	6" x 3" x 1/4" x 1'-4"	ST 400
	P3	1	6" x 3" x 1/4" x 1'-0"	ST 400
	P5	3	4" x 3" x 1/4" x 1'-6"	ST 400
	P6	1	4" x 3" x 1/4" x 1'-0"	ST 400
"B" SHEAR STUD	SA2	6	"B" STUD x 0'-4"	ST 400
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 1/4" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.







NO.	DATE	REVISION	BY
1	4-24-69	AS NOTED	GCC

PEF. DRWGS.

7-A82-10	7-22-68
7-A83-61	1-6-69
7-A84-1	10-15-68
7-A84-5 & 16	7-22-68
7-A84-42	10-15-68
SA-124	1-6-69
7-AB1-29 & 30	1-6-69
7-AB1-33 & 34	1-6-69
7-A82-19	1-6-69

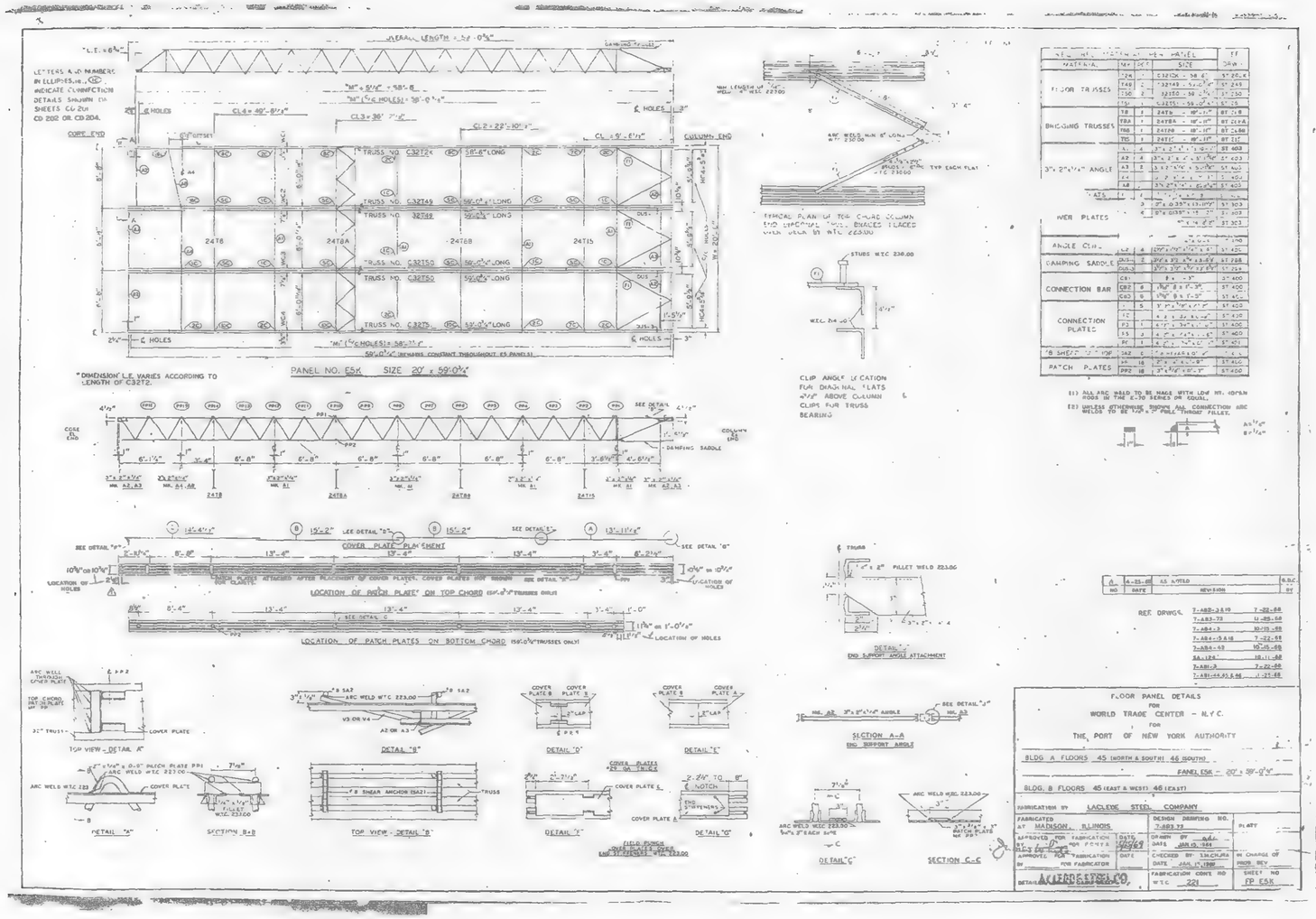
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. NOS. 44 (SOUTH ONLY)

PANEL ERBN - 20' x 59'-0 3/4"

FABRICATION BY ALLEGHENY STEEL DIVISION

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-A83-61	PLATE
APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.A.	DATE 6/12/69	DRAWN BY: GCC DATE APRIL 2, 1969	
APPROVED FOR FABRICATION BY: [illegible] FOR FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE APRIL 2, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. - 1221	SHEET NO. FP ERBN



MATERIAL	MK	QTY	SIZE	WT
FLOOR TRUSSES	T2K	1	C32T2K - 58'-6"	ST 22L.K
	T49	2	C32T49 - 59'-0⅝"	ST 249
	T50	2	32T50 - 59'-0⅝"	ST 250
	T5	1	C32T5 - 58'-0⅜"	ST 25
BRIDGING TRUSSES	T8	3	24T8 - 19'-11⅝"	BT 248
	T8A	1	24T8A - 19'-11⅝"	BT 248A
	T8B	1	24T8B - 19'-11⅝"	BT 248B
	T15	1	24T15 - 19'-11⅝"	BT 215
3"x 2"x¼" ANGLE	A1	4	3"x 2"x 1'-10⅛"	ST 403
	A2	4	3"x 2"x 4'-5⅛"	ST 403
	A3	2	3"x 2"x 5'-11⅝"	ST 403
	A4	1	3"x 2"x 1'-1"	ST 403
	A8	1	3"x 2"x 1'-6⅝"	ST 403
	ATS	11	3"x 2"x 8"	ST 403
WEB PLATES		3	9"x 0'-3⅜" x 1'-11⅝"	ST 303
		4	9"x 0'-3⅜" x 1'-7"	ST 303
			9"x 1'-6"	ST 303
ANGLE CLIP	L2	8	6"x 4"x ½" x 0'-4"	ST 406
DAMPING SADDLE	DAS-1	2	9"x 6"x 8" x 2'-8½"	ST 288
	DAS-2	1	9"x 3"x 7"x 2'-8½"	ST 284
CONNECTION BAR	CB1	1	8"x 3"	ST 400
	CB2	8	1⅝" 8"x 1'-3"	ST 400
	CB3	8	1⅝" 8"x 1'-2"	ST 400
CONNECTION PLATES		5	9"x 7"x 1'-1"	ST 400
	PC	1	6"x 4"x 2'-11¼"	ST 400
	P2	1	6"x 4"x 3'-4½"	ST 400
	P3	3	6"x 4"x 4'-5"	ST 400
	PC	1	6"x 4"x 5'-4½"	ST 400
6 SHEET "J" TYP	SA2	6	7"x 7"x 0'-10"	SA
PATCH PLATES	PP1	16	3"x 6"x 2'-4"	ST 406
	PP2	18	3"x 6"x 1'-10"	ST 406

(1) ALL ARC WELD TO BE MADE WITH LOW HYD. 10 SERIES RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE ¼" & ⅜" FILLET THROAT FILLET.

NO	DATE	REVISION	BY
A	4-25-68	AS NOTED	B.D.C

REF DRWGS.

7-A82-3819	7-22-68
7-A83-73	11-25-68
7-A84-3	10-15-68
7-A84-5 & 18	7-22-68
7-A84-43	10-15-68
AA-124	10-11-68
7-A81-3	7-22-68
7-A81-44,85 & 86	7-25-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)

PANEL E5K - 20'-0" x 59'-0⅝"

BLDG. B FLOORS 45 (EAST & WEST) 46 (EAST)

FABRICATION BY LACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS

APPROVED FOR FABRICATION BY [illegible] DATE 6-19-68

APPROVED FOR FABRICATION BY [illegible] DATE

APPROVED FOR FABRICATION BY [illegible] DATE

DETAILED BY ACIER-ETEL-CO. CHICAGO, ILLINOIS

DESIGN DRAWING NO. 7-683.22

DRAWN BY [illegible] DATE JAN. 15, 1968

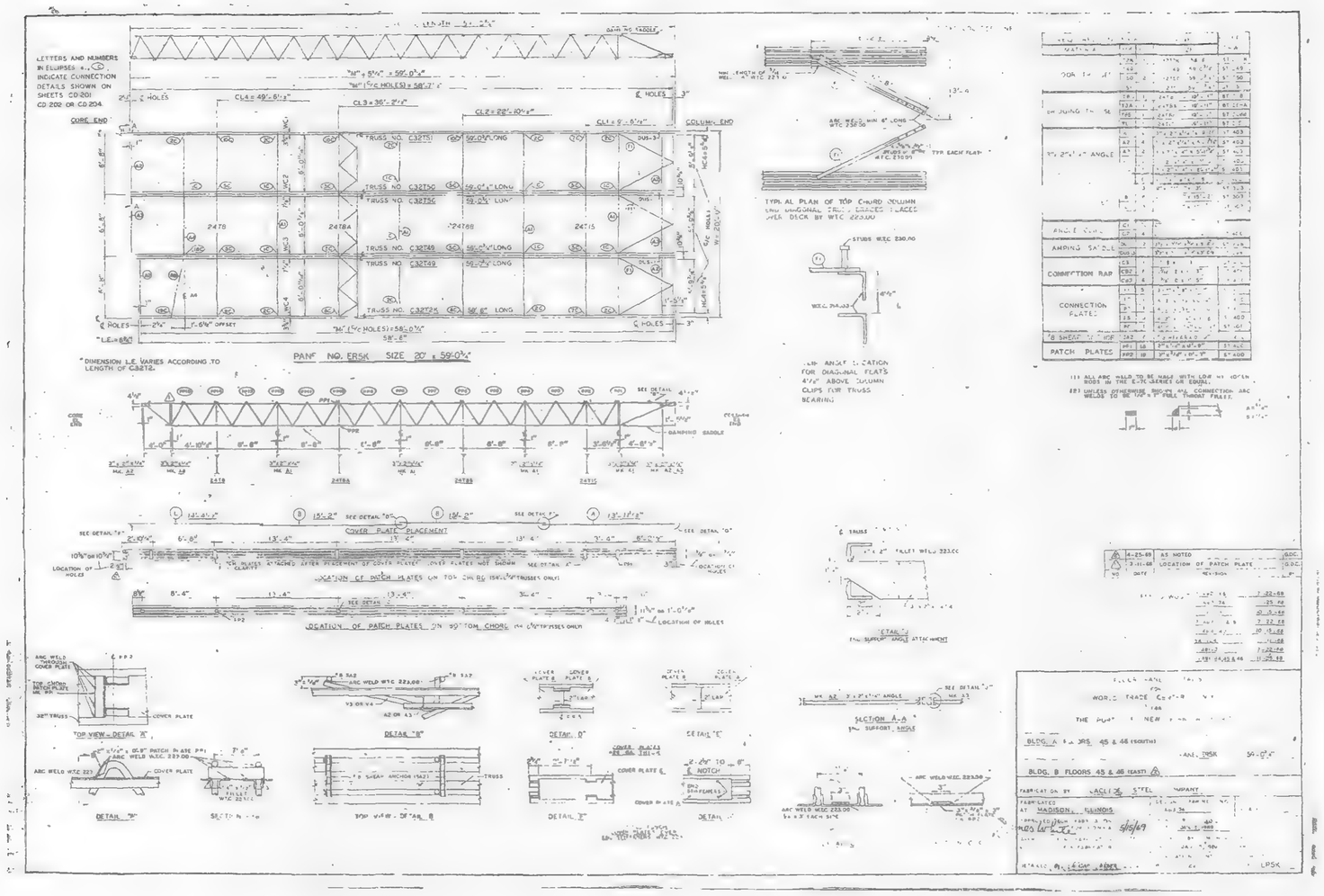
CHECKED BY S.M.C./M.R.A. DATE JAN. 1ST, 1968

FABRICATION CONTR. NO. W.T.C. 221

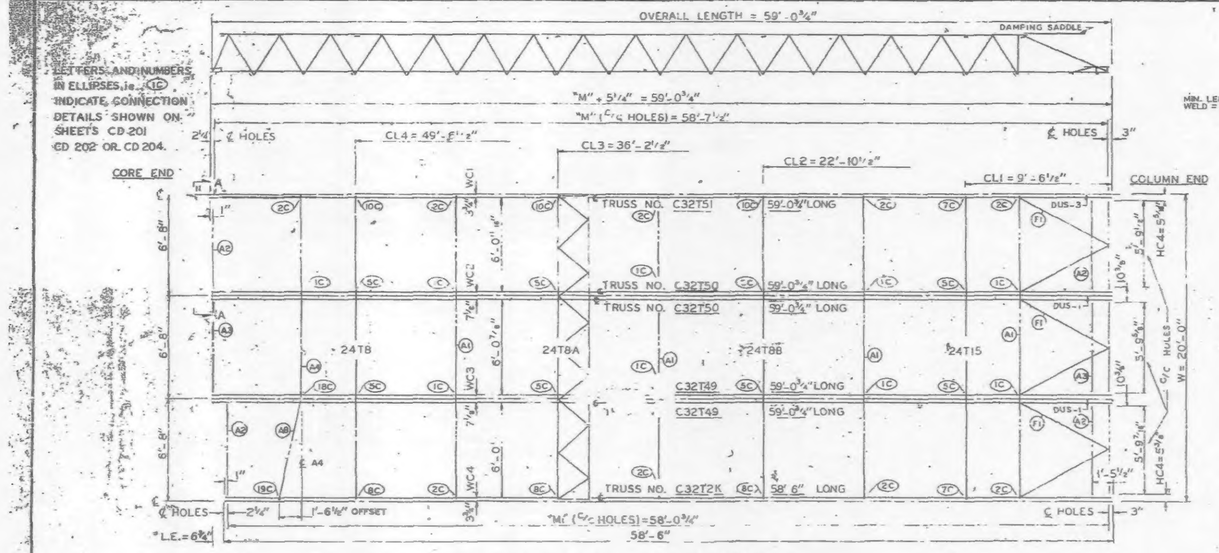
PLATT

IN CHARGE OF PROD. REV.

SHEET NO. FP E5K

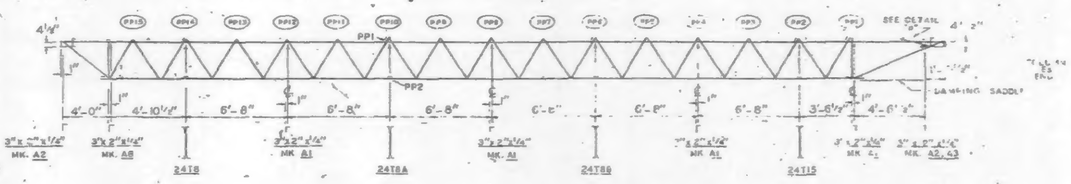

LETTERS AND NUMBERS IN ELLIPSES e.g. (C2), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD-201, CD-202 OR CD-204.
CORE END
COLUMN END
TRUSS NO. C32T51
TRUSS NO. C32T50
TRUSS NO. C32T49
TRUSS NO. C32T2K
59'-0¼" LONG
59'-0" LONG
59'-0¼" LONG
59'-6" LONG
24T8
24T8A
24T8B
24T15
PANEL NO. ER5K SIZE 20' x 59'-0¾"
* DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.
SEE DETAIL
DAMPING SADDLE
COVER PLATE PLACEMENT
LOCATION OF PATCH PLATES ON TOP CHORD (54 & 60" TRUSSES ONLY)
LOCATION OF PATCH PLATES ON BOTTOM CHORD (54 & 60" TRUSSES ONLY)
LOCATION OF HOLES
TOP VIEW - DETAIL "A"
DETAIL "B"
DETAIL "C"
DETAIL "D"
DETAIL "E"
DETAIL "F"
SECTION A-A
SUPPORT ANGLE
TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL FULL LENGTH PLATES OVER DECK BY WTC 223.00
STUBS WTC 230.00
L4b ANGLE LOCATION FOR DIAGONAL PLATES 4'-4" ABOVE COLUMN CLIPS FOR TRUSS BEARING
DETAIL "J"
SUPPORT ANGLE ATTACHMENT
PATCH PLATES
ANGLE CLIPS
DAMPING SADDLE
CONNECTION PLATES
CONNECTION RAP
BRACING
(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70-SERIES OR EQUAL.
(2) UNLESS OTHERWISE INDICATED ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.
AS NOTED
LOCATION OF PATCH PLATE
4-25-69
3-11-68
7-22-68
7-22-68
10-15-68
11-1-68
7-22-68
10-15-68
WORK TRADE CLASSIFICATION
THE PLANT IS NEW
BLDG. A FLOORS 45 & 46 (SOUTH)
BLDG. B FLOORS 45 & 46 (EAST)
FABRICATED BY LACLEDE STEEL COMPANY
FABRICATED AT MADISON, ILLINOIS
5/15/69
LP5K

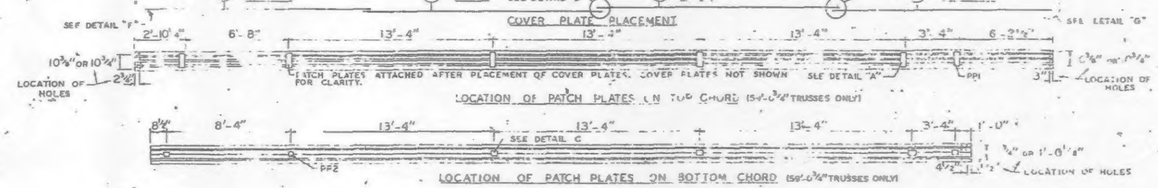
LETTERS AND NUMBERS IN ELLIPSES, ie. (1C) INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 TO CD 202 OR CD 204.

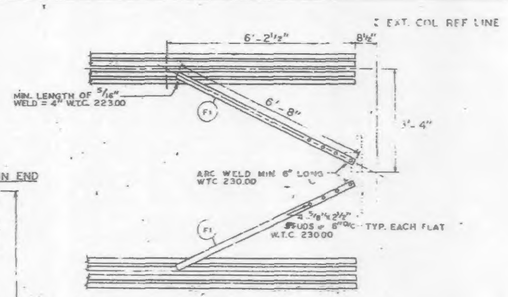


DIMENSION "L.E." VARIES ACCORDING TO LENGTH OF C32T2.

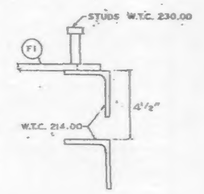
PANEL NO. ER5K SIZE 20' x 59'-0 3/4"







TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

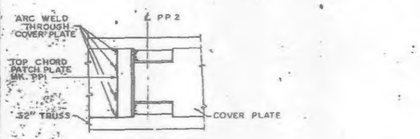


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4'-2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

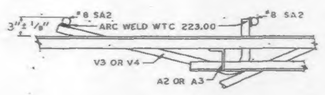
REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T2K	1	C32T2K - 58'-6"	ST 202K
	T49	2	C32T49 - 59'-0 3/4"	ST 249
	T50	2	C32T50 - 59'-0 3/4"	ST 250
	T51	1	C32T51 - 59'-0 3/4"	ST 251
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-11 5/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-11 5/8"	ST 403
	A4	1	3" x 2" x 1/4" x 19'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-10 3/8"	ST 403
DIAGONAL FLATS	F1	6	1'-7" x 7 1/2" x 1/4" x 1'-8"	ST 402
COVER PLATES	A	3	9" x .0135" x 13'-11 1/2"	ST 303
	B	8	9" x .0135" x 15'-2"	ST 303
	C	3	9" x .0135" x 14'-6 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 1 1/2" x 1/4" x 0'-6"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 6"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/16" x 5'-8 1/2"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/16" x 3'-8 1/2"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	1 1/16" ϕ x 1'-3"	ST 400
	CB3	6	1 5/16" ϕ x 1'-3"	ST 400
CONNECTION PLATES	F1	5	3 1/2" x 3/8" x 6'-1"	ST 400
	F2	1	4'-2" x .39" x 0'-4"	ST 400
	P3	1	4'-2" x .39" x 1'-0"	ST 400
	P5	3	4'-2" x 1/4" x 1'-8"	ST 400
	PF	1	4'-2" x .39" x 0'-2"	ST 401
5/8 SHEAR ANCHOR	SA2	6	5/8 ϕ HEADED x 0'-4"	ST 400
PATCH PLATES	PP1	18	2" x 1'-4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. 80 FCAW RODS IN THE E-70 SERIES OR EQUAL.

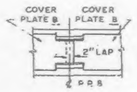
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



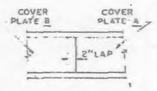
TOP VIEW - DETAIL "A"



DETAIL "B"

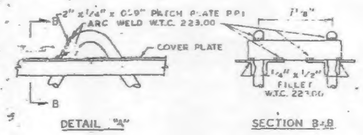


DETAIL "D"

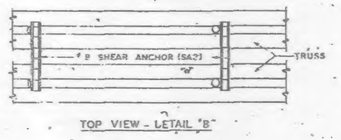


DETAIL "E"

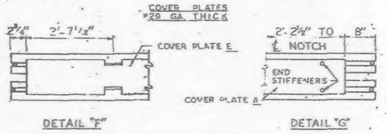
SECTION A-A
END SUPPORT ANGLE



DETAIL "A" SECTION B-B

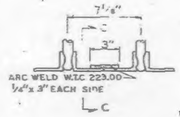


TOP VIEW - DETAIL "B"

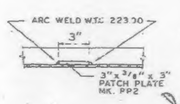


DETAIL "F" DETAIL "G"

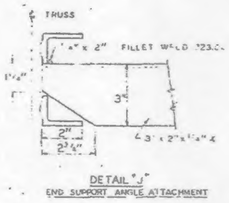
FIELD PUNCH COVER PLATES OVER END STIFFENERS W.T.C. 223.00



DETAIL "C"



SECTION C-C



DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO	DATE	REVISION	BY

REF. DRWGS.

7-AB2-3 & 13	7-22-68
7-AB3-74	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-44, 45 & 46	11-25-68

FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

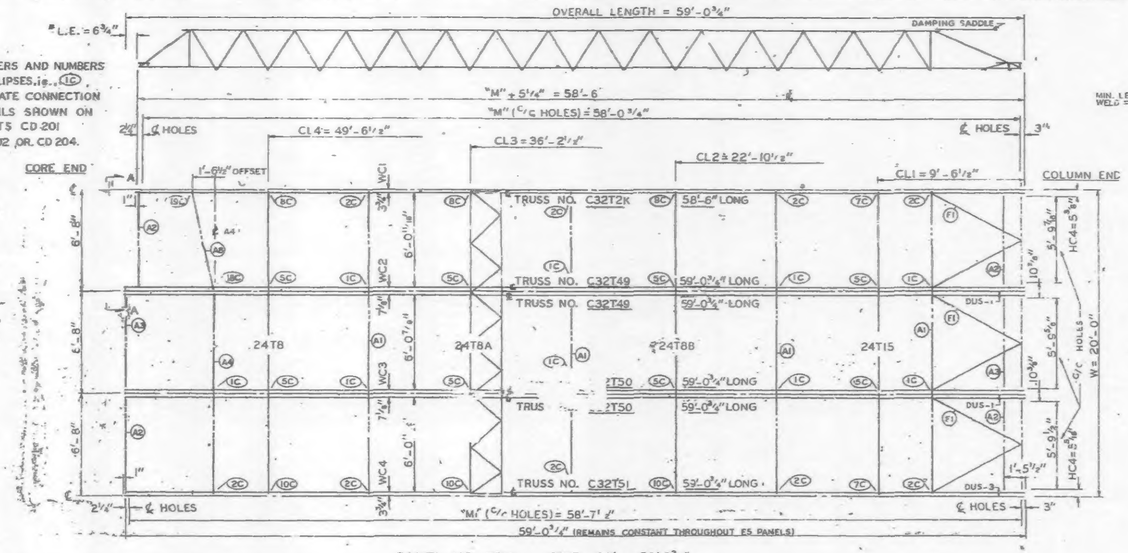
BLDG. A FLOORS 45 & 46 (SOUTH)

PANEL ER5K - 20' x 59'-0 3/4"

FABRICATION BY LACLEDE STEEL COMPANY

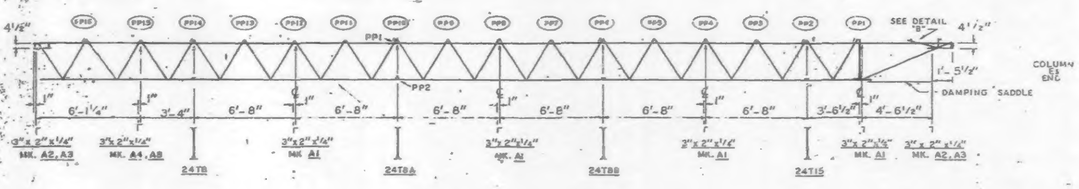
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO 7-AB3-74	PLATE
APPROVED FOR FABRICATION FOR P.O.N.Y.A. BY	DATE 2/6/69	DRAWN BY: DATE JAN. 15, 1969	
APPROVED FOR FABRICATION BY FOR FABRICATOR	DATE	CHECKED BY: E.M.CHURA DATE JAN. 15, 1969	IN CHARGE OF PROD. DEV.
DETAILED BY: A. CARL WEBER		FABRICATION CONT NO. W.T.C. 221	SHEET NO. FP ER5K

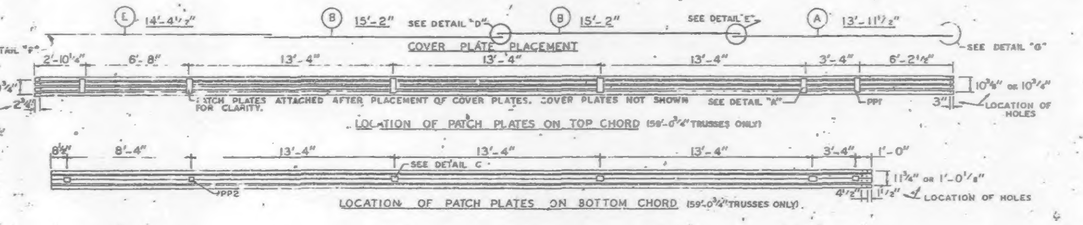
LETTERS AND NUMBERS IN ELLIPSES, ie., (1C), INDICATE CONNECTION DETAILS SHOWN ON SHEETS CD 201 CD 202 OR CD 204.

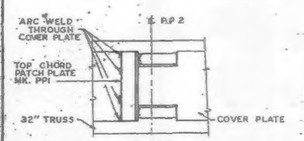


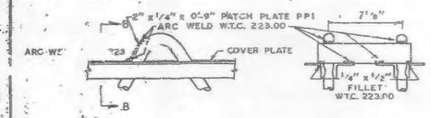
PANEL NO. E5K SIZE 20' x 59'-0 3/4"

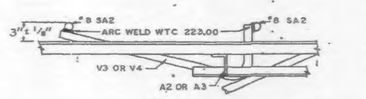
DIMENSION L.E. VARIES ACCORDING TO LENGTH OF C32T2.

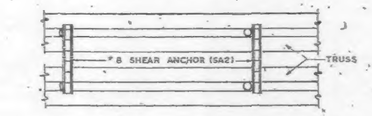


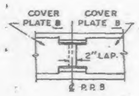


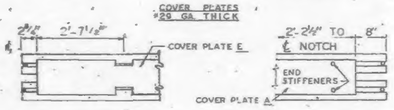


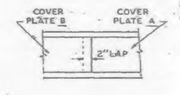


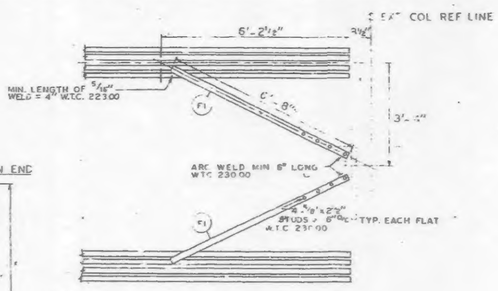




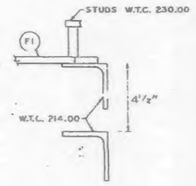








TYPICAL PLAN OF TOP CHORD COLUMN END DIAGONAL TRUSS BRACES PLACED OVER DECK BY W.T.C. 223.00

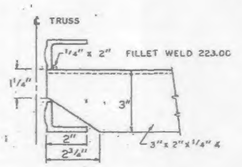


CLIP ANGLE LOCATION FOR DIAGONAL FLATS 4 1/2" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

REQUIRED MATERIAL PER PANEL				REF.
MATERIAL	MK.	PCS.	SIZE	DRWG.
FLOOR TRUSSES	T2K	1	C32T2K - 58'-6"	ST 202K
	T49	2	C32T49 - 59'-0 3/4"	ST 249
	T50	2	C32T50 - 59'-0 3/4"	ST 250
	T51	1	C32T51 - 59'-0 3/4"	ST 251
BRIDGING TRUSSES	T8	1	24T8 - 19'-11"	ST 208
	T8A	1	24T8A - 19'-11"	ST 208A
	T8B	1	24T8B - 19'-11"	ST 208B
	T15	1	24T15 - 19'-11"	ST 215
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"	ST 403
	A2	4	3" x 2" x 1/4" x 5'-1 5/8"	ST 403
	A3	2	3" x 2" x 1/4" x 5'-1 5/8"	ST 403
	A4	1	3'-2" x 1" x 1/4" x 1'-3"	ST 403
	A8	1	3" x 2" x 1/4" x 6'-0 5/8"	ST 405
DIAGONAL FLATS	F1	6	1 1/2" x 5/8" x 6'-8"	ST 402
COVER PLATES	A	3	0" x .0135" x 13'-11 1/4"	ST 303
	B	8	0" x .0135" x 15'-2"	ST 303
	E	3	0" x .0135" x 14'-8 1/2"	ST 303
ANGLE CLIP	C1	20	2" x 1 1/2" x 1/4" x 0'-8"	ST 400
	C2	4	2 1/2" x 1 1/2" x 1/4" x 8"	ST 400
DAMPING SADDLE	DUS-1	2	3 1/2" x 3 1/2" x 3/8" x 9'-6 1/2"	ST 298
	DUS-3	1	3 1/2" x 3 1/2" x 3/8" x 3'-0 1/2"	ST 298
CONNECTION BAR	CB1	1	1" ϕ x 1'-3"	ST 400
	CB2	6	1 3/16" ϕ x 1'-3"	ST 400
	CB3	6	1 3/16" ϕ x 1'-5"	ST 400
CONNECTION PLATES	F1	5	3 1/2" x 3/8" x 6 1/2"	ST 400
	P2	1	4 1/2" x .34" x 0'-9"	ST 400
	P3	1	4 1/2" x .34" x 1'-11"	ST 400
	P5	3	4 1/2" x 1 1/2" x 1'-8"	ST 400
	P6	1	4 1/2" x .34" x 3'-6"	ST 401
#8 SHEAR ANCHOR	SA2	8	#8 REBAR x 0'-4"	ST 406
PATCH PLATES	PP1	18	2" x 1/4" x 0'-9"	ST 400
	PP2	18	3" x 3/8" x 0'-3"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HY. 10 GEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.



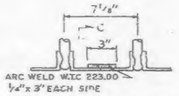
DETAIL "J"
END SUPPORT ANGLE ATTACHMENT

NO.	DATE	REVISION	BY

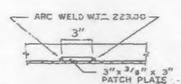
REF. DRWGS.

7-AB2-3 & 10	7-22-68
7-AB3-73	11-25-68
7-AB4-3	10-15-68
7-AB4-15 & 16	7-22-68
7-AB4-42	10-15-68
SA-124	10-11-68
7-AB1-3	7-22-68
7-AB1-44,45 & 46	11-25-68

SECTION A-A
END SUPPORT ANGLE



DETAIL "C"



SECTION C-C

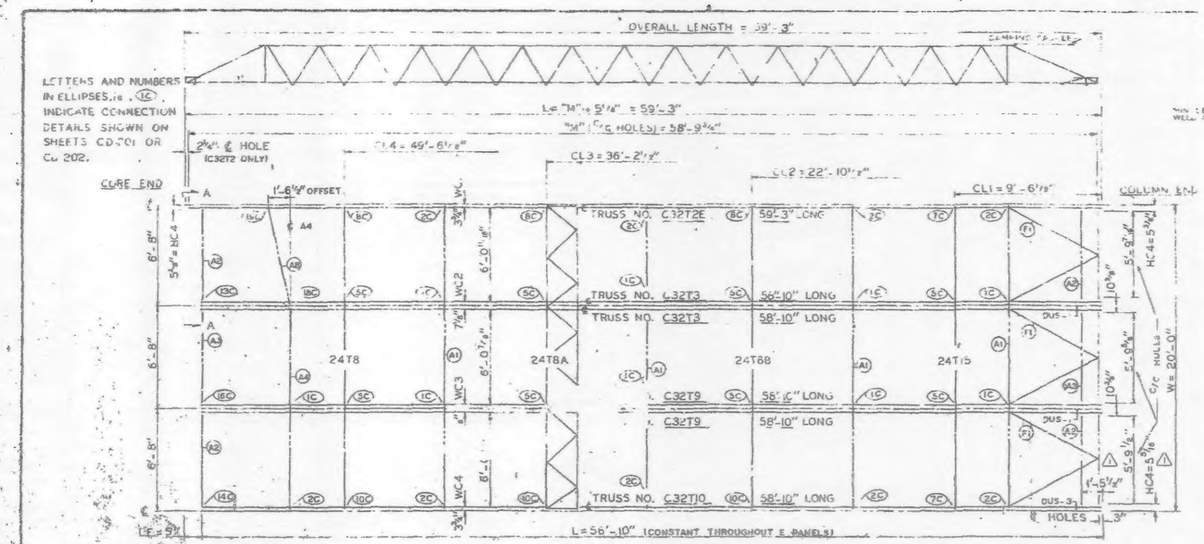
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

BLDG. A FLOORS 45 (NORTH & SOUTH) 46 (SOUTH)

PANEL E5K - 20' x 59'-0 3/4"

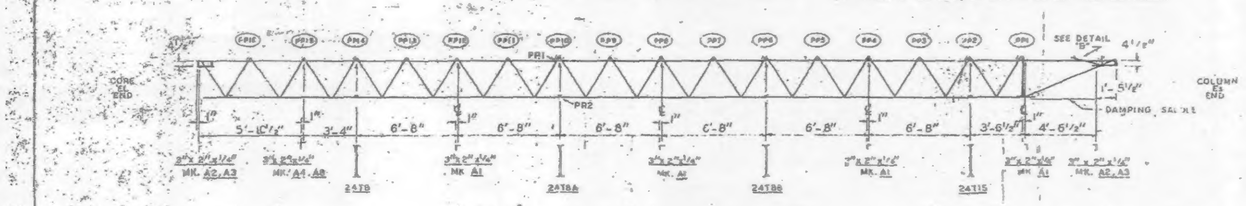
FABRICATION BY LACLEDE STEEL COMPANY

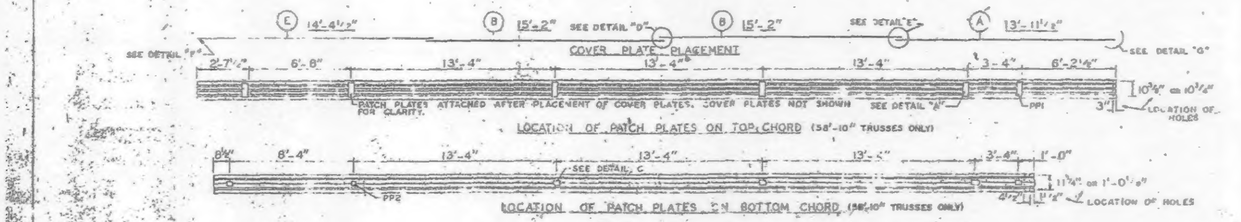
FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB3-73	PLATE
APPROVED FOR FABRICATION BY: [illegible] FOR P.O.N.Y.A.	DATE 2/4/69	DRAWN BY: gdc DATE JAN. 15, 1969	
APPROVED FOR FABRICATION BY: FOR FABRICATOR	DATE	CHECKED BY: T.M. CHURA DATE JAN. 15, 1969	IN CHARGE OF PROD. DEV.
LACLEDE STEEL CO. DETAILED BY: A. CARL WEBER		FABRICATION CONT. NO. W.T.C. 221	SHEET NO. FP E5K

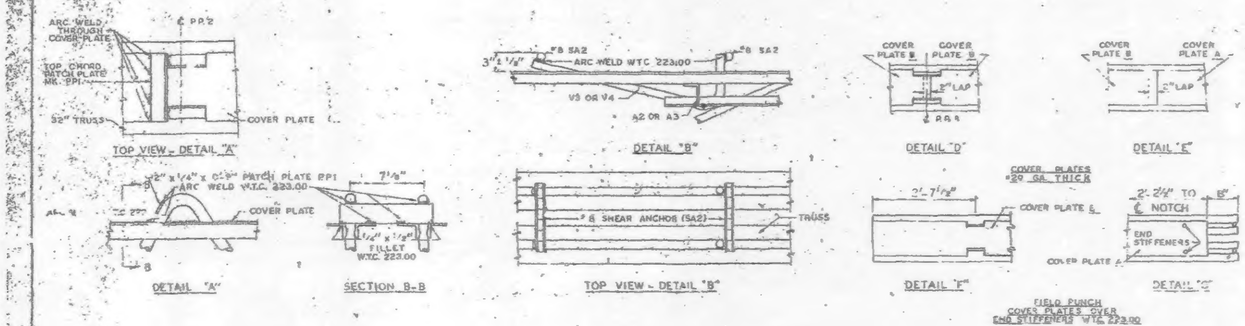


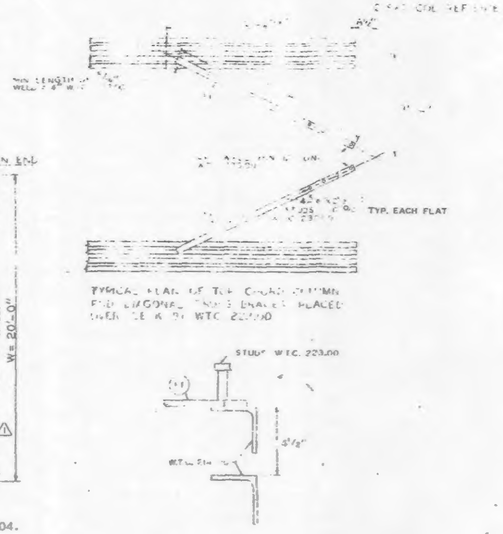
PANEL NO. E1E SIZE 20' x 59'-3"

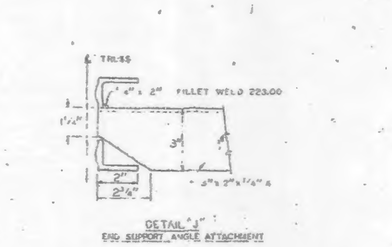
CONNECTION 18-C & 19-C SHOWN ON SHEET CD 204.
SPECIAL CONNECTIONS 13-C, 16-C & 14-C SHOWN ON SHEETS CD 209, CD 208 & CD 207 RESPECTIVELY.











MARK	PCS.	SIZE	WT.
TRUSS	TE	1	[illegible]
	T3	2	[illegible]
	T9	2	[illegible]
	T10	1	[illegible]
	TP	1	24'6" x 18'-11"
	TPA	1	24'6" x 18'-11"
	TPE	1	24'6" x 18'-11"
	TPE	1	24'6" x 19'-11"
3" x 2" x 1/4" ANGLE	A1	4	3" x 2" x 1/4" x 19'-11"
	A2	4	3" x 2" x 1/4" x 5'-11 3/4"
	A3	2	3" x 2" x 1/4" x 5'-11 3/4"
	A4	1	3" x 2" x 1/4" x 5'-3"
	A8	1	3" x 2" x 1/4" x 6'-6 3/4"
DIAGONAL FLAT	F1	6	1" x 6" x 1'-8"
COVER PLATES	A	3	9" x .0135" x 135.1 lbs
	B	6	9" x .0135" x 19'-2"
	E	3	9" x .0135" x 14'-8 1/2"
ANGLE CLIPS	C1	20	2" x 2" x 3/16" x 0'-8"
	C2	4	2" x 2" x 3/16" x 8"
DAMPING SADDLE	DUS-1	2	3/16" x 4" x 3" x 3"
	DUS-3	1	3/16" x 3" x 3" x 3'-0"
CONNECTION PAR	CB1	1	1" ø x 1'-3"
	CB2	6	3/4" ø x 1'-5"
	CB3	6	1 3/16" ø x 1'-5"
CONNECTION PLATES	F1	5	3" x 3" x 3/8" x 1'-0"
	F2	1	4" x 3" x 3/8" x 1'-8"
	F3	1	4" x 3" x 3/8" x 1'-0"
	F5	3	4" x 3" x 1/2" x 1'-6"
	PF	1	4" x 3" x 3/8" x 1'-3"
3/8 SHEAR ANCHOR	SA2	8	3/8" ø REBAR x 0'-3"
PATCH PLATES	PP1	18	2" x 1/4" x 0'-8"
	PP2	18	3" x 3/16" x 0'-3"

(1) ALL ARC WELD TO BE MADE WITH LOW HY. 40CEN RODS IN THE E-70 SERIES OR EQUAL.

(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 1" FULL THROAT FILLET.

NO.	DATE	REVISION	BY
1	9-19-68	AS NOTED	T.M.C

REF. DRWGS.

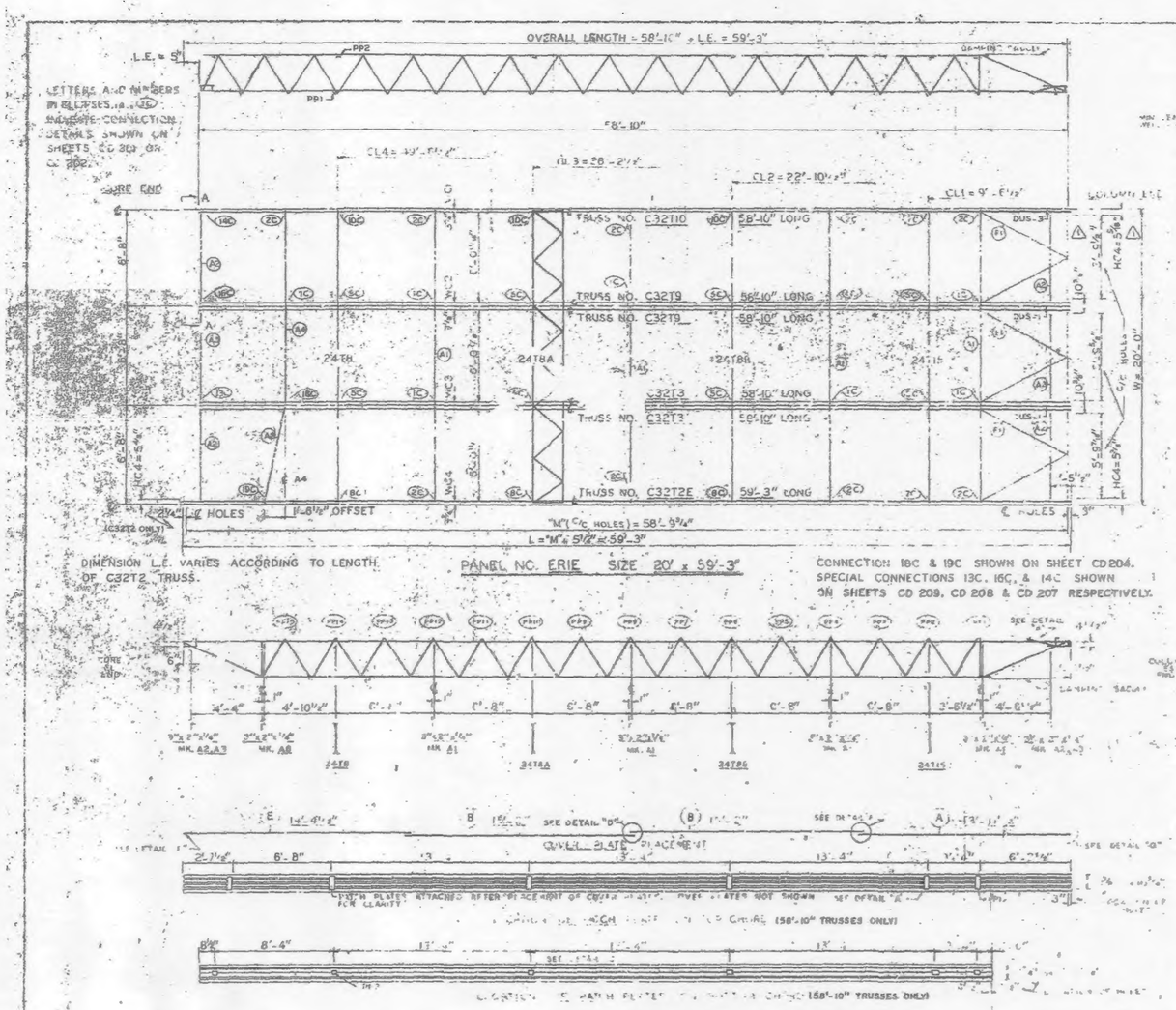
7-482-3 & 10	4-15-68
7-AB1-11	5-10-68
7-484-3, 3.1 & 39	1-3-68
7-AB4-13 & 16	5-6-68
7-AB4-42	4-1-68
SA-124	10-20-68
7-AB1-3	4-10-68
7-AB1-6, 7 & 8	5-10-68

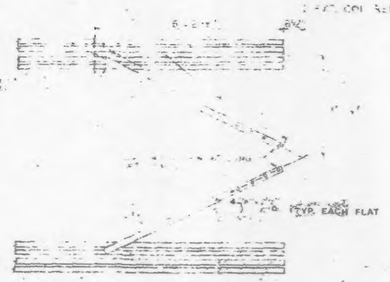
FLOOR PANEL DETAILS
FOR
WORLD TRADE CENTER - N.Y.C.
FOR
THE PORT OF NEW YORK AUTHORITY

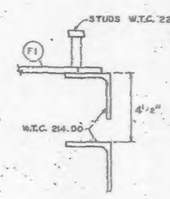
BLDG. A DOORS 10-11 (NORTH & SOUTH)
6Y (NORTH) PANEL E1E - 20' x 59'-3"

FABRICATION BY ACLEDE STEEL COMPANY

FABRICATED AT MADISON, ILLINOIS		DESIGN DRAWING NO. 7-AB1-11 5 10-68	PLATE
APPROVED FOR FABRICATION FOR PORT OF NEW YORK AUTHORITY BY:	DATE 9/25/68	DRAWN BY GBG DATE JULY 22, 1968	IN CHARGE OF SHOP DET.
APPROVED FOR FABRICATION BY:	DATE	CHECKED BY T.M. CHUPP DATE JULY 22, 1968	SHEET NO. FP E1E
STEEL BY STEARNS WERNER		FABRICATION CONT. NO. WTC 221	



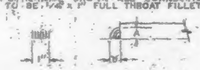


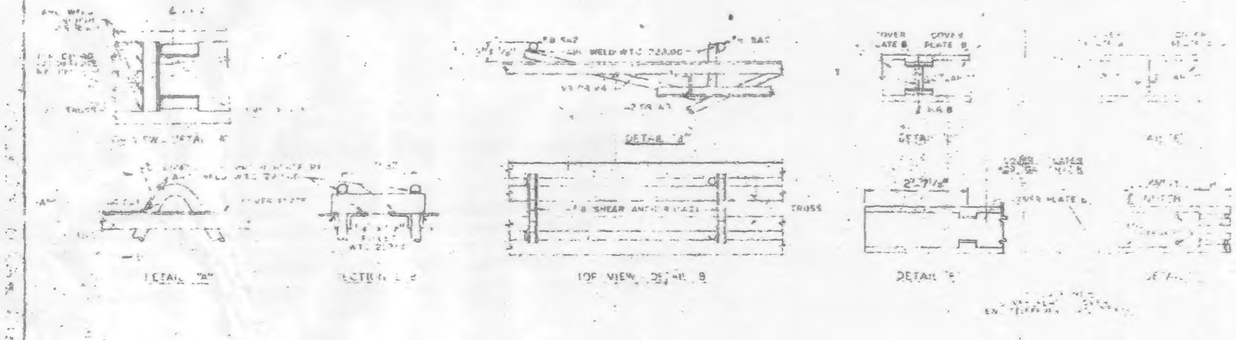


CLIP ANGLE LOCATION FOR DIAGONAL FLATS, 4⅛" ABOVE COLUMN CLIPS FOR TRUSS BEARING.

			SIZE	WT.
	LE	1	L.E. = 5½"	ST 202E
	T	1	58'-10"	ST 203
	T2	1	59'-3" - 58'-10"	ST 209
	T2E	1	59'-3" - 58'-10"	ST 210
	T4	1	43'-5½"	ST 208
	T4A	1	43'-5½" - 6"	ST 208A
	T4E	1	43'-5½" - 1'-6"	ST 208B
	T1C	1	9'-5½"	ST 215
	A1	6	3" x 2½" x 5'-11⅛"	ST 403
	A2	2	3" x 2½" x 5'-11⅛"	ST 401
3"x 2½"x⅛" ANGLE	A3	2	3" x 2½" x 5'-11⅛"	ST 403
	A4	1	3"x2½"x⅛" x 13'-3"	ST 403
	A8	1	3"x 2½"x ⅛" x 6'-8"	ST 405
DIAGONAL FLAT	F1	6	1'-2" x 5'-8" x 6'-8"	ST 402
	A	3	8" x 8" x 13½" x ½"	ST 403
GUSSET PLATES	B	4	2'-4" x 1'-3" x 15'-2"	ST 403
	E	3	4" x 2'-3" x 14'-4½"	ST 201
ANGLE CLIPS	C1	20	2"x 3½" x 3"x 0'-8"	ST 406
	C2	4	2½" x 1½" x 3"x 8"	ST 406
ANGLE SPACERS	US-2	2	3½" x 3½" x 4"x 1'-0"	ST 203
	US-3	1	3½" x 3½" x 4"x 1'-0"	ST 203
	DUS-1	1	1" x 3" x 1'-0"	ST 400
CONNECTION BAR	CB7	8	⅜" x 1'-8"	ST 400
	CB8	6	⅜" x 1'-5"	ST 400
CONNECTION PLATES	P1	5	3'-2" x 3/8" x 6'-2"	ST 400
	P2	1	4'-2" x .39" x 0'-9"	ST 400
	P3	1	4'-2" x .39" x 1'-0"	ST 400
	P5	3	4'-2" x 1/4" x 1'-6"	ST 400
	P6	1	4'-2" x .39" x 0'-9"	ST 401
⅞" SHEAR ANCHOR	SA2	8	⅞" HEAD x 0'-9"	ST 400
PATCH PLATES	PP1	18	3" x 3/4" x 0'-9"	ST 400
	PP2	18	3" x 3/4" x 0'-9"	ST 400

(1) ALL ARC WELD TO BE MADE WITH LOW HYDROGEN RODS IN THE E-70 SERIES OR EQUAL.
(2) UNLESS OTHERWISE SHOWN ALL CONNECTION ARC WELDS TO BE 1/4" x 2" FULL THROAT FILLET.





NO.	DATE	REVISION	BY
1	9-19-68	AS NOTED	T.M.C.

3,5,10	4-15-68
12	5-10-68
3,7,11,13	7-1-68
4,6,9	7-3-68
8	4-15-68
8,7,4,8	9-10-68

GENERAL DETAILS

10-11 (SOUTH)

ERIE

STEEL COMPANY

DRAWN: J. URBANIC 7-25-68 CHECKED: 5-10-68

James White 9/25/68

APPROVED: JULY 22, 1968

FP ERIE